



ABBAS GREGORIUS

*Subnigri coloris erat, et crispas capillas, ut
ceteri Aethiopes, habebat.*

RESEARCHES
INTO THE
PHYSICAL HISTORY
OF
Mankind.

BY
JAMES COWLES PRICHARD, M.D.

SECOND EDITION.

IN TWO VOLUMES.

VOL. I.

LONDON:
PRINTED FOR JOHN AND ARTHUR ARCH,
CORNHILL.

1826.



J. M. G. & Co. Stationers
Chancery Lane, London.

RESEARCHES

INTO THE

PHYSICAL HISTORY

OF

Man kind.

BY

JAMES COWLES PRICHARD, M.D.

SECOND EDITION.

TWO VOLUMES.

VOL. I.

LONDON:

PRINTED FOR JOHN AND ARTHUR ARCH,

J. M'Creery, Took's Court,
Chancery Lane, London.

CORNHILL.

1828.

TO

THE VENERABLE AND JUSTLY CELEBRATED

PROFESSOR BLUMENBACH,

OF THE UNIVERSITY OF GOETTINGEN;

BY WHOSE EMINENTLY SUCCESSFUL LABOURS,

THE PHYSICAL HISTORY OF MANKIND

HAS BEEN CHIEFLY ILLUSTRATED,

THIS WORK

IS,

WITH HIS PERMISSION,

RESPECTFULLY DEDICATED

BY *H.*

THE AUTHOR.



TO

THE VENERABLE AND JUSTLY CELEBRATED

PROFESSOR BLUMENBACH,

OF THE UNIVERSITY OF GÖTTINGEN;

BY WHOSE EMINENTLY SUCCESSFUL LABOURS

THE PHYSICAL HISTORY OF MANKIND

HAS BEEN CHIEFLY ILLUSTRATED,

THIS WORK

IS

WITH HIS PERMISSION,

RESPECTFULLY DEDICATED

BY

THE AUTHOR.

PREFACE.

THE former edition of this work, notwithstanding many defects and inaccuracies, obtained so far the approbation of the public, as to induce me at an early period to adopt the resolution of reprinting it, at some future time, in a more correct and complete state. The want of leisure, and of the opportunity for prosecuting such researches, has allowed me to proceed but very slowly in the fulfilment of this design, and I am well aware that the object proposed has been at last but imperfectly attained. Yet I entertain hope that the work now offered to the public may not be altogether useless or unacceptable, since the subjects to which it relates, and which are matters of general curiosity, have not been,


as far as I know, by any other writer, considered exactly in the same points of view.*

The introductory chapter will be found to contain a sufficient account of the nature and design of this treatise, and I think it needless to add any thing in this place to what has there been said, unless it be to anticipate an objection that may be offered to some parts of my work, in which I may be thought to have entered at too great length into certain inquiries, connected, not in the most obvious and direct manner, with the principal subject of investigation. Among these is the discussion, which occupies the first book, of the general facts relating to the dispersion of animal and vegetable species, as well as some of the subsequent attempts to elucidate the his-

* From this observation I do not altogether except the various and excellent works of Professor Blumenbach, to which I am in the highest degree indebted, or the Lectures of Mr. Lawrence, from whose extensive and accurate researches, though on some particular subjects I differ widely from the author in opinion, I must acknowledge myself to have derived much valuable information.

tory of particular races and tribes of men. A candid survey of the whole train of inquiries will, I believe, convince any person who shall have gone through it, that no part could with propriety have been omitted; and those readers who have not patience, or sufficient interest in the subject, to follow a series of particular observations, from which the inferences are collected in an analytical manner, will do well to begin with the last book, which contains a recapitulation of the whole train of argument, and a general statement of the inferences deduced from it. The relation of each particular topic to the main subject of inquiry will thus become as speedily evident, as in a work written wholly in a synthetical form.

An investigation of subjects so obscure as the causes which have given rise to the varieties of the human species, and the separate existence of different races and nations, could hardly be conducted without the occasional admission of conjectures. But I have endea-



voured so to distinguish those parts of my work which are in any degree hypothetical, either by inserting them as notes, or by otherwise separating them, that the uncertainty in which they are involved, may not extend to such conclusions as shall be found to rest on a more solid basis.

Interest in the subject, to which the particular observations from which the inferences are collected in an analytical manner, will do well to begin with the last book, which contains a recapitulation of the whole train of argument, and a general statement of the inferences deduced from it. The relation of each particular topic to the main subject of inquiry will thus become as speedily evident as in a work written wholly in a synthetic form.

An investigation of subjects so obscure as the causes which have given rise to the varieties of the human species, and the separate existence of different races and nations, could hardly be conducted without the occasional admission of conjectures. But I have endeavoured

Page

SECT. 7. Expositions to some of the foregoing observa-

tions 40

CHAP. III. Of the Dispersion of Animals 43

SECT. 1. Of the Dispersion of Insects 43

2. Of the Dispersion of Birds 46

3. Of the Dispersion of Marine Animals 48

4. Of the Dispersion of Quadrupeds and Rep-

tiles 50

5. Zoological Characters of each of the Pro-

vinces above described 50

6. Division of the principal Families between

these different Regions 52

7. Of the Animals in Islands 54

8. Concluding Remarks on the Dispersion of

Animals in particular 58

9. Recapitulation with respect to the Disper-

sion of Organized Beings in General 60

10. Of the Origin and Diffusion of the Species of

Plants 62

11. Of the Origin and Diffusion of the Species of

Animals 64

12. Of the Origin and Diffusion of the Species of

Plants 66

13. Of the Origin and Diffusion of the Species of

Animals 68

14. Of the Origin and Diffusion of the Species of

Plants 70

15. Of the Origin and Diffusion of the Species of

Animals 72

16. Of the Origin and Diffusion of the Species of

Plants 74

17. Of the Origin and Diffusion of the Species of

Animals 76

18. Of the Origin and Diffusion of the Species of

Plants 78

19. Of the Origin and Diffusion of the Species of

Animals 80

20. Of the Origin and Diffusion of the Species of

Plants 82

21. Of the Origin and Diffusion of the Species of

Animals 84

Page

1

INTRODUCTION

BOOK I.

ON THE ORIGIN AND DIFFUSION OF ORGANIZED BEINGS.

—CONSIDERATION OF THE QUESTION, WHETHER EACH

SPECIES EXISTS IN ONLY ONE RACE, OR HAS SPRUNG

FROM SEVERAL DIFFERENT ORIGINS 11

CHAP. I. *Introductory Remarks—Opinion and argu-**ment of Linnaeus on this subject* 11CHAP. II. *Of the Dispersion of the Species of Plants* 16SECT. 1. *Three hypotheses which have been maintained* 162. *General facts—Vegetation of distant re-**gions compared with that of Europe* 183. *Of the means provided by Nature for the**Dispersion of Plants—Facts referring to the**Migrations and Colonies of Plants* 234. *More particular inquiry into the manner in**which the Families of Plants are grouped—**Relations between the Vegetation of coun-**tries, analogous with respect to Climate* 275. *Phænomena relating to the Vegetation of**Islands* 346. *Recapitulation and conclusion* 37

VOL. I.

b

	Page
SECT. 7. <i>Exceptions to some of the foregoing observations</i>	40
CHAP. III. <i>Of the Dispersion of Animals</i>	43
SECT. 1. <i>Of the Distribution of Insects</i>	43
2. <i>Of the Dispersion of Birds</i>	46
3. <i>Of the Dispersion of Marine Animals</i>	48
4. <i>Of the Dispersion of Quadrupeds and Reptiles of the Land—Division of the Earth into Zoological Provinces</i>	53
5. <i>Zoological Character of each of the Provinces above described</i>	56
6. <i>Division of the principal Families between these different Regions</i>	68
7. <i>Of the Animals found in Islands</i>	74
8. <i>Concluding Remarks on the Dispersion of Animals in particular</i>	78
9. <i>Recapitulation with respect to the Dispersion of Organized Beings in General</i>	79
NOTES—ON CHAPTER III.	
<i>Comparison of the preceding Remarks, with the History of Mankind, and the Deluge, contained in Genesis</i>	81
SECT. 1. <i>Statement of an Hypothesis on this Subject</i>	81
2. <i>Proofs and Illustrations</i>	83
3. <i>Bearing of this inference on the following Discussion</i>	87
BOOK II.	
—ATTEMPT TO ELUCIDATE THE INQUIRY, WHETHER ALL THE RACES OF MEN BELONG TO ONE SPECIES	
CHAP. I. <i>Analytical Statement of the different Methods of determining the limits of Species, and of elucidating the proposed Inquiry</i>	90

	Page
SECT. 1. Meaning of the Terms Species—Genus.	
<i>Specific Difference</i>	90
2. First method of determining on the Identity	
<i>or Diversity of Species, viz. by reference to</i>	
<i>the principal Laws of the Animal Economy</i>	93
3. Second Criterion—Reference to the pro-	
<i>pagation of Animals of mixed Breed</i>	95
4. Third method of Inquiry—Criterion found-	
<i>ed on Analogy to known Variations</i>	99
5. Fourth method of Inquiry—Facts to be	
<i>collected directly bearing on the Subject</i>	100
CHAP. II. Application of the two former methods of	
<i>Inquiry to the different races of Men.</i>	104
SECT. 1. Application of the first Method. Physiolo-	
<i>gical Comparison of the different Races of</i>	
<i>Men—with respect to the general Laws of</i>	
<i>the Animal Economy—with respect to Dis-</i>	
<i>eases</i>	104
Conclusion of this Subject	125
SECT. 2. Application of the Second Method of In-	
<i>quiry, founded on the Facts relating to the</i>	
<i>Propagation of mixed Races, to the present</i>	
<i>Question</i>	126
CHAP. III. Application of the Third Method of In-	
<i>quiry, founded on the Comparison of analogous</i>	
<i>Variations</i>	130
PART I. Account of the Phenomena of Diversity in	
<i>Mankind</i>	130
SECT. 1. General Remarks, Introductory to the Sub-	
<i>ject</i>	130
2. Varieties of Colour—Correspondence in the	
<i>Colours of the Skin, Hair, and Eyes</i>	131
3. Of the Structure of the Parts on which	
<i>the Variety of Colour depends</i>	133

	Page
SECT. 4. Of the principal Varieties of Colour.	132
1. Of the Melanic Variety.	138
2. Of the Albino Variety.	140
3. Of the Xanthous Variety.	148
SECT. 5. Of varieties of Form, particularly in the bony Structure—Observations on the principal varieties of the Skull.	156
1. Caucasian Variety.	166
2. Mongolian Variety—Description of the Skull.	167
3. Æthiopian Variety—Description of the Skull.	168
4. Skull of the American.	169
5. Skull of the Malays and South Sea Islanders.	170
SECT. 6. Further Observations on the Varieties of the Skull.	174
1. On Stenobregmate Skulls.	174
2. On the Platybregmate Skulls.	182
SECT. 7. Varieties in the Figure and Proportion of Parts.	187
CHAP. IV. Application of the Third Method of Inquiry, continued; Part 2.—Survey of analogous Phenomena in other Species of Animals.	192
SECT. 1. Examples of this Analogy in respect of Colour.	192
2. Remarks on this Analogy, between the Varieties of Colour in Men, and those in other Species of Animals.	197
3. Of Peculiarities in the Constitution connected with the Varieties of Colour.	199
4. Of the Varieties of Texture in the Human	

Page		Page
201	<i>Skin, and of some analogous Phenomena in other Species</i>	201
207	SECT. 5. Of Varieties of Form in the lower tribes of Animals, analogous to the corresponding Diversities above described in Mankind	207
215	6. Of the hereditary Transmission of Varieties	215
222	7. Of the different kinds of Hair which distinguish particular Races of Men	222
230	8. Of Diversity of Stature	230
232	9. Recapitulation and Conclusion of this Argument	232
	BOOK III.	
	APPLICATION OF THE FOURTH METHOD OF INQUIRY—	
	SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR RACES. PART I. OF THE AFRICAN RACES	237
237	CHAP. I. Introduction—Method to be pursued in this and the following Books	237
241	CHAP. II. General Remarks on the Native Races of Africa—Remains of the Libyan Race	241
241	SECT. 1. Distribution of the African Nations	241
242	2. Remains of the Ancient Libyan Race	242
245	3. Physical Characters of these Tribes	245
250	CHAP. III. Nations of Western Negroland, or Guinea	250
250	SECT. 1. General Observations	250
251	2. Of the Nations bordering on the Rivers Senegal and Gambia	251
251	1. The Yollofs	251
252	2. The Mandingos	252
253	3. The Foulahs	253
259	4. Some other Nations of inferior Note	259
260	SECT. 3. Of the Nations between the Gambia and the Gold Coast	260

	Page
SECT. 4. <i>Of the Nations inhabiting the Gold Coast,</i>	
109 . . . <i>and the Countries in the interior adjacent .</i>	264
To 25 5. <i>Of the Nations on the Slave Coast, and</i>	
guibna <i>the interior Country</i>	270
702 . 16. <i>Of the Natives of Benin</i>	272
CHAP. IV. <i>Of the Races of People in the Interior of</i>	
219 <i>Africa</i>	274
SECT. 1. <i>Division—Nations to the Southward—Fe-</i>	
993 . . . <i>latah Tribes from the West—Negro Em-</i>	
069 . . . <i>pires</i>	274
174 219 ¶ 1. <i>Felatah Tribes</i>	275
929 . . . 2. <i>Negro Empires</i>	275
3. <i>Empire of Bornou</i>	276
SECT. 2. <i>Negro Nations to the eastward of Bornou .</i>	278
—78 3. <i>General Remarks on the Physical Cha-</i>	
117 117 <i>acters of these Nations—Black Races—</i>	
729 . . . <i>Red Races</i>	279
211 4. <i>People of Fezzan</i>	281
CHAP. V. <i>Nations of the north-eastern parts of Africa,</i>	
140 <i>including the Empire of Abyssinia, Nubia, and</i>	
140 <i>Egypt</i>	282
115 SECT. 1. <i>Of the Empire of Habesh</i>	282
119 . . . 2. <i>Of the History of the Ancient Ethiopians</i>	289
249 . . . 3. <i>Enumeration of the different Races of Peo-</i>	
069 931 119 <i>ple in the Empires of Abyssinia and Ethio-</i>	
039 . . . <i>pia</i>	295
219 119 4. <i>Of the Shangalla, and other Negro Tribes</i>	
169 . . . <i>in Abyssinia and Nubia</i>	297
169 . . . 5. <i>Of the Red or Copper-coloured Races . .</i>	299
969 . . . ¶ 1. <i>Of the Nubæ</i>	300
269 . . . ¶ 2. <i>Of the Bedjas and their Descendants,</i>	
069 910 119 <i>the Ababdé and Bisharein</i>	305
119 6. <i>Physical Characters of the Abyssinians</i>	308
009 . . . 7. <i>Of the Copts</i>	309

Page		Page
	SECT. 8. <i>Physical Characters of the old Ethiopians</i>	312
202	9. <i>Of the Complexion and Physical Structure</i>	
270	<i>of the ancient Egyptians</i>	316
	10. <i>Accounts given by the Ancients</i>	316
270	11. <i>Paintings in Temples, and other Re-</i>	
	<i>mains</i>	320
	12. <i>Form of the Skull</i>	323
272	13. <i>Conclusion</i>	328
	CHAP. VI. <i>Of the Nations of Southern Africa</i>	332
	SECT. 1. <i>General Observations</i>	332
272	2. <i>Physical Character of the Hottentots</i>	334
	3. <i>Of the Bosjesmans, or Bushmen</i>	336
278	4. <i>Physical Characters of the Bushmen</i>	336
	SECT. 3. <i>Of the Kaffers</i>	339
280	5. <i>Of the Coast of Zanguebar</i>	342
282	6. <i>Of the Nations in the Interior, behind the</i>	
282	<i>Coast of Zanguebar</i>	343
	7. <i>Extent of the Kaffers towards the North—</i>	
	<i>Natives of Delagoa Bay—Mosambique</i>	344
288	8. <i>Of the Nations of the Empire of Kongo</i>	348
	9. <i>General Observations of the Extension</i>	
	<i>of the Kaffer Race and Language in</i>	
290	<i>Africa, southward of the Equator</i>	353
	CHAP. VII. <i>General Observations on the Physical Cha-</i>	
292	<i>acters of the African Nations, and conjectures on</i>	
292	<i>the relation of these, particularly of their Com-</i>	
292	<i>plexion, to the Climate of Africa</i>	356
	SECT. 1. <i>Classification of Races</i>	356
294	2. <i>Of the Relation to Climate</i>	358
	BOOK IV.	
	SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR	
	RACES, CONTINUED. PART II. HISTORY OF THE RACES	
296	OF MEN DISPERSED THROUGH THE GREAT SOUTHERN	
296	OCEAN	365

	Page
CHAP. I. <i>General Account of the different Classes of</i>	
<i>People found in these Regions</i>	365
CHAP. II. <i>Of the Papua Races</i>	370
SECT. 1. <i>Of the Nations of New Guinea and the</i>	
<i>neighbouring Islands</i>	370
2. <i>Of the Natives of the long ranges of</i>	
<i>Islands, extending from New Guinea into</i>	
<i>the southern Pacific Ocean</i>	375
¶ 1. <i>Islanders of Louisiade</i>	376
2. <i>Of Bougainville Isle and the adjoining</i>	
<i>Groupe</i>	377
3. <i>Islanders of Salomon and of Santa</i>	
<i>Cruz</i>	377
4. <i>Of Taomaco, and Australia del Es-</i>	
<i>piritu Santo</i>	380
5. <i>Of the New Hebrides</i>	383
6. <i>Of New Caledonia</i>	387
SECT. 3. <i>Of the Papua Tribes in the Isles of the</i>	
<i>Indian Archipelago, and on the Continent</i>	
<i>of Malacca</i>	388
CHAP. III. <i>Of the Races of Black Savages with</i>	
<i>straight Hair, in the Indian Archipelago, and in</i>	
<i>the Austral Countries</i>	392
SECT. 1. <i>Races of this Description in the Indian</i>	
<i>Ocean</i>	392
¶ 1. <i>Of the Haraforas, or Alfoërs</i>	393
SECT. 2. <i>Of the Natives of Terra Australis</i>	395
¶ 2. <i>Natives of Van Diemen's Land com-</i>	
<i>pared with the foregoing</i>	404
3. <i>General Observations on the Anato-</i>	
<i>mical Structure of the Black Races,</i>	
<i>both Papuas and Australians</i>	406
CHAP. IV. <i>Description of the Polynesian Tribes in the</i>	
<i>Islands of the Pacific Ocean</i>	412
SECT. 1. <i>General Observations</i>	412

	Page
SECT. 2. Natives of Easter Island	413
3. Natives of New Zealand	416
4. Natives of Otaheite and the Society Isles	418
5. Natives of the Tonga or Friendly Islands	420
6. Natives of the Marquesas	422
7. Natives of the Sandwich Islands	424
8. Natives of Bauman's Isles	426
9. Natives of the Caroline Islands	428
10. General Remarks on the Social State, Religion, and distinguishing Characters of the Polynesian Tribes in the Pacific Ocean	429
CHAP. V. Of the Population of the Indian Archipelago	434
SECT. 1. Of the Dispersion of the Polynesian Race in the Indian Ocean	434
2. Supposed Descent of this Race from the Malays	436
3. Supposed Descent of this Race from the Ja- vanese. Probable History of the Poly- nesian Tribes in the Indian Ocean	438
CHAP. VI. Subject of the last Chapter continued. Ac- count of particular Nations	445
SECT. 1. Of the Natives of Sumatra and the adja- cent Islands	445
2. Of the Javanese	449
3. Of the People of Celebes	452
4. Of the Natives of Borneo	454
5. Of the Philippine Islanders	454
6. Of the Ladrone or Marian Isles	465
7. Of the Moluccas	467
8. Of the other Indian Islanders	467
CHAP. VII. Of the Races of People inhabiting the Isl- ands in the Western Indian Ocean, or Indo-African Seas	469

	Page
SECT. 1. General Remarks	469
2. <i>Natives of the Nicobar Islands</i>	469
3. <i>Natives of the Andaman Islands</i>	471
4. <i>Natives of the Maldivian Islands</i>	472
5. <i>Natives of Madagascar</i>	473
6. <i>Concluding Remarks on the Population of the Islands in the Indian Ocean</i>	478
CHAP. VIII. Physical Observations on the Races of Men surveyed in this Book, considered comparatively and separately	480
SECT. 1. Comparative Observations on the Papua and Polynesian Races	480
2. <i>Of the physical Varieties which are to be found in the Polynesian Race</i>	483
3. <i>Of the Variations which are discovered in the Papua and Australian Races</i>	486
4. <i>Remarks on the physical Varieties of all these Nations collectively. Inferences from them with respect to the Origin of national Varieties. Relation to Climate</i>	488
BOOK V.	
SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR RACES CONTINUED. PART III. HISTORY OF THE INDO-EUROPEAN NATIONS	491
CHAP. I. Introductory Remarks	491
CHAP. II. Of the People of India	496
SECT. 1. Remarks on the History of the Hindoos, their Language, and Origin	496
2. <i>Of the Dialects of the Indian Language, and the Subdivisions of the People into different Nations</i>	502
3. <i>Of the Physical Characters of the Hindoos</i>	507

CONTENTS.

xix

	Page
SECT. 4. <i>Of the Natives of Ceylon</i>	516
¶ 1. <i>Nations inhabiting Ceylon</i>	516
2. <i>Physical Characters of the People of Ceylon</i>	519
5. <i>Of the Gipseys</i>	520

NOTES TO VOL. I.

NOTE A. <i>On the Language of the Ancient Libyans</i>	525
NOTE B. <i>On the Language of the Felatahs</i>	527

Sect. 4. Of the Nations of Ceylon	216
§ 1. Nations inhabiting Ceylon	216
2. Physical Characters of the People of Ceylon	219
3. Of the Gipsies	220

NOTES TO VOL. I.

Note A. On the Language of the Ancient Libyans	222
Note B. On the Language of the Phœnicians	227

CONTENTS

THE SECOND VOLUME.

	Page
CHAP. III. Of the Original Population of Persia and the neighbouring Countries	1
SECT. 1. Remarks on the Ancient History of Persia	1
2. Of some other Races in Asia, allied to the Persian Nations	8
¶ 1. Of the Afghans	9
2. Of the Belooches	11
3. Of the Buchars	13
4. Of the Kurds	15
5. Of the Armenians	16
6. The Ossetes	18
SECT. 3. Of the Physical Characters of the Persians, and the other kindred Nations which have been noticed in the preceding Section	21
CHAP. IV. Of the Ancient Population of Lesser Asia, and of the contiguous parts of Europe, as far as the Danube	30
SECT. 1. General Remarks on the Population of these Countries—Pelasgian, Lydian, and Thracian branches	30
2. Of the Pelasgian Race, and of the principal Tribes of the Greek Nation	34
3. Of the Lydians in the southern parts of Lesser Asia	45

	Page
SECT. 4. <i>Of the Thracians in the Northern Parts of Lesser Asia, and in Europe</i>	51
CHAP. V. <i>Of the Population of Italy</i>	58
SECT. 1. <i>Of the Umbri</i>	58
2. <i>Of the Etruscans</i>	65
¶ 1. <i>History of the Etruscan States in Italy</i>	66
2. <i>Testimonies respecting the Origin of the Etruscans</i>	71
3. <i>Concluding Remarks</i>	74
SECT. 3. <i>Of the Population of the South of Italy</i>	78
¶ 1. <i>Of the Cnōtrii</i>	78
2. <i>Of the Ausonians, or Opici</i>	82
SECT. 4. <i>Population of Sicily</i>	87
CHAP. VI. <i>Of the remains of some ancient races of people in the West of Europe</i>	90
SECT. 1. <i>Population of Spain—Celtiberian Tribes</i>	90
¶ 2. <i>History of the Iberi</i>	92
SECT. 2. <i>Of the Ligurians</i>	96
3. <i>Population of Corsica and Sardinia</i>	102
CHAP. VII. <i>Of the Population of Gaul and Britain</i>	105
SECT. 1. <i>Division of Gaul and Britain between the Belgic and Celtic nations</i>	105
¶ 1. <i>Relation of the British Belgæ to the Belgic Gauls</i>	107
2. <i>Relation of the Aboriginal Britons to the Celtic Gauls</i>	109
SECT. 2. <i>Of the Origin of the Belgæ, both of Gaul and Britain</i>	118
3. <i>Of the Origin of the Caledonians, Picts, and Scots</i>	133
¶ 1. <i>Of the Native People of Valentia</i>	134
2. <i>Of the sixteen Northern Tribes</i>	135
1. <i>Of the Scots</i>	139

¶ 2. <i>Of the Picts</i>	142
3. <i>Observations on the Languages of the Picts and Scots</i>	146
CHAP. VIII. <i>Of the German Race</i>	150
SECT. 1. <i>Extent of Ancient Germany—Knowledge possessed by the Ancients of its Boundaries</i>	150
2. <i>Division of the German Nation into Tribes</i>	153
3. <i>Of the Origin of the Goths, Vandals, and Lombards</i>	158
CHAP. IX. <i>General Observations on the Origin, Antiquity, Manners, and Physical Characters of the Celtic and German Races</i>	166
SECT. 1. <i>Antiquity of these Nations</i>	166
2. <i>Remarks on the Institutions of the Celtic and German Nations</i>	170
¶ 1. <i>On the Manners and Institutions of the Gauls and Britons</i>	170
2. <i>On the Mythology of the German Nations</i>	174
SECT. 3. <i>Of the Physical Characters of these Nations</i>	175
CHAP. X. <i>Population of the North-eastern parts of Europe</i>	179
SECT. 1. <i>Of the Scythians</i>	179
2. <i>Scythæ and Sarmatæ the same People—a race distinct from the Teutonic</i>	189
3. <i>Boundaries of Ancient Sarmatia—Different Nations included within its Limits</i>	190
4. <i>Of the Slavonian Race</i>	195
5. <i>Of the Origin and Physical Characters of the Slavonic Nations</i>	200
CHAP. XI. <i>Concluding Remarks on the History of the Indo-European Nations</i>	202

BOOK VI.

SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR	
RACES CONTINUED. PART IV. HISTORY OF THE	
WESTERN ASIATIC NATIONS	206
CHAP. I. <i>General Remarks</i>	206
CHAP. II. <i>Of the Syrian or Semitic Nations</i>	208
SECT. 1. <i>Of the Denomination and Tribes of this Family</i>	208
2. <i>Of the Chasdim, and their Descendants, the later Chaldeans, the Hebrews, and the Arabs</i>	212
3. <i>Of the Aramæans, or proper Syrians</i>	215
4. <i>Of the Phœnicians and other Chamite Nations</i>	216
5. <i>Physical Characters of the Semitic Nations</i>	218
CHAP. III. <i>Of the Georgians</i>	232
CHAP. IV. <i>Of the Caucaséan Nations</i>	235

BOOK VII.

SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR	
RACES CONTINUED.	
PART V. OF THE RACES OF PEOPLE INHABITING NORTH-	
ERN AND EASTERN ASIA, INCLUDING SOME NATIONS	
IN THE EASTERN PARTS OF EUROPE	240
CHAP. I. <i>General Remarks. Division of Nations</i>	240
CHAP. II. <i>Of the Tschude, or Finnish Race</i>	244
SECT. 1. <i>General Account of the Nations belonging to this Family</i>	244
2. <i>Of the Finns and Laplanders</i>	250
3. <i>Second Division. Of the Permians</i>	255
4. <i>Third Division — Uralian or Siberian Tschudes</i>	259
1. <i>Vogouls</i>	259

CONTENTS.

xxv

	Page
CHAP. I. General Observations on the Physical Characters of the Asiatic Nations	261
CHAP. II. Of the Ostiaks	262
CHAP. III. Of the Samoyedes	268
CHAP. IV. Of the Mongolian Race	275
CHAP. V. Of the Tartar, or Turkish Race	281
SECT. 1. General Remarks on the History of the Tartar, or Turkish Race	281
SECT. 2. History of the different Nations of Tartar, or Turkish Origin	286
1. Of the Western Tartars	286
2. Of the Southern Tartar Nations, commonly termed Turkish	289
3. Tartars of Northern Asia	290
SECT. 3. General Observations on the Physical Characters of the Tartar, or Turkish Races	294
CHAP. VI. History of the Tungusians. Physical Character of the Tungusians of Daouria. Of the Mantschū	299
CHAP. VII. Of some other Nations in the North-eastern Extremities of Asia	303
SECT. 1. Enumeration of these Races	303
2. Of the Yenisean Ostiaks	304
3. Of the Yakagers	305
4. Of the Koriaks	307
5. Of the Tschuktschi	308
6. Of the Kumtschadales	311
7. Of the Aino, or Kurilians	312
8. Of the Japanese and Lieu-kieu	314
9. Of the Koreans	318
CHAP. VIII. Of the Chinese, and Indo-Chinese Nations	320
SECT. 1. Of the Chinese	320
2. Of the Indo-Chinese Nations	323

CHAP. IX. <i>General Observations on the Races of Men described in this Book, particularly on their Physical Characters</i>	329
BOOK VIII.	
SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR RACES CONCLUDED.	
PART VI. HISTORY OF THE NATIVE RACES OF AMERICA	336
CHAP. I. <i>Introductory and General Observations</i>	336
SECT. 1. <i>General Remarks on the Nations of America in comparison with each other</i>	336
¶ 1. <i>On the Physical Characters of the American Aborigines</i>	337
2. <i>Relations between the American Languages</i>	341
SECT. 2. <i>Remarks on the American Languages, and on the Physical Characters of the People, in comparison with those of other Races</i>	350
¶ 1. <i>On their Languages</i>	350
2. <i>On their Physical Characters</i>	355
CHAP. II. <i>History of the Nations in the Western and Northern parts of America</i>	358
SECT. 1. <i>Two Classes of Nations traced into the North-western parts of the Continent</i>	358
2. <i>History of the Nations of Anahuac</i>	360
3. <i>Traces of the Aztec Migration to the Southward of the Rio Gila</i>	370
4. <i>Nations of the Western Coast in New California, and further to the Northward</i>	373
5. <i>Nations of California</i>	385
6. <i>Of the Physical Characters of the Nations already enumerated</i>	386
¶ 1. <i>Race of Yucuatl, or Nootka</i>	388
2. <i>Race of Koluschi</i>	390
3. <i>Of the Californian Nations</i>	395

	Page
SECT. 4. <i>Natives of Mexico</i>	397
SECT. 7. <i>Of the Karalit or Esquimaux</i>	399
1. <i>Different Nations of Esquimaux</i>	401
2. <i>Physical Characters of the Esquimaux</i>	404
CHAP. III. <i>Of the Races of People in the Eastern parts of North America</i>	411
1. <i>General Survey</i>	411
2. <i>Of the Algonquin race. History of the Lenni Lenape</i>	414
2. <i>Of the Eastern Branches of the Algonquin Race</i>	417
3. <i>Western Branches of the Algonquin Race</i>	419
4. <i>Northern Branches of the Algonquin Race</i>	421
SECT. 3. <i>Of the Iroquois, and other Nations akin to them</i>	424
2. <i>Of the Nadowessies, Sioux, or Dakota</i>	426
3. <i>Of the Osages, Missouris, and other Tribes of the same Nation</i>	428
SECT. 4. <i>Of the Floridian Nations</i>	431
1. <i>Of the Cherokees</i>	431
2. <i>The Chickasahs and Choktahs</i>	432
3. <i>The Creeks, or the Muskohge and Seminoles</i>	433
4. <i>Traces of other Nations in the Countries southward of the Ohio</i>	434
CHAP. IV. <i>Of some Nations in the Interior of North America</i>	437
1. <i>General Remarks</i>	437
2. <i>Of several other Nations bordering on the Missouri and the Rocky Mountains</i>	441
3. <i>Of some Nations in Southern Louisiana, and of the Paducas and Apaches</i>	443

	Page
CHAP. V. <i>Observations on the Races of People mentioned in the two preceding Chapters, and descriptions of their Physical Characters</i>	446
SECT. 1. <i>General Remarks on the History of these Nations</i>	446
2. <i>Accounts of the Physical Characters of the People in the Eastern Parts of North America</i>	448
3. <i>Physical Characters of the People in the Interior of North America</i>	455
CHAP. VI. <i>Of the South American Nations—Races of People inhabiting Chili, Patagonia, and Tierra del Fuego</i>	462
SECT. 1. <i>General Account of these Nations</i>	462
1. <i>The Moluches, or Araucanos</i>	463
2. <i>The Puelches</i>	465
SECT. 2. <i>Of the Physical and Moral Characters of the Puelche, and the Moluche, or Araucanos</i>	470
1. <i>Of the Puelche</i>	470
2. <i>Of the Moluche</i>	472
SECT. 3. <i>Natives of Tierra del Fuego</i>	476
CHAP. VII. <i>Of the Guarani, and of the Nations related to them in different parts of South America</i>	479
SECT. 1. <i>History of the Guarani</i>	479
1. <i>Southern Guarani of Paraguay</i>	482
2. <i>Western Guarani</i>	483
3. <i>Eastern Guarani of Brazil</i>	484
4. <i>Tribes related to this Race on the Maragnon</i>	485
SECT. 2. <i>Physical Characters of the Guarani</i>	487
CHAP. VIII. <i>Of the different Nations of Paraguay, exclusive of the Guarani</i>	490
SECT. 1. <i>Divisions</i>	490

	Page
SECT. 2. <i>Nations of Eastern Paraguay</i>	492
¶ 1. <i>Of the Charrua, and other tribes al-</i> <i>lied to them</i>	492
2. <i>Of the Guayanas and other Eastern</i> <i>Nations</i>	496
SECT. 3. <i>Of the Inhabitants of Chaco, and other</i> <i>Countries Westward of the Paraguay</i>	498
CHAP. IX. <i>Nations in the Middle Region of South</i> <i>America, from the twentieth degree of South Lati-</i> <i>tude to the parallel of the Maragnon</i>	503
SECT. 1. <i>Division</i>	503
2. <i>Nations to the eastward of the Andes</i>	504
3. <i>Nations of Peru</i>	505
¶ 1. <i>Physical Characters of the Peruvians</i>	507
CHAP. X. <i>Nations in the Northern Region of South</i> <i>America, viz. in the Countries Northward of the</i> <i>Maragnon</i>	509
SECT. 1. <i>Of the Countries in the Interior, and of</i> <i>their Inhabitants</i>	509
2. <i>Of the Caribbees, Tamanacs, Chaymas,</i> <i>and other Nations of Terra Firma</i>	511
¶ 1. <i>Enumeration of the Tribes</i>	511
2. <i>History of this Race</i>	514
SECT. 3. <i>Of the Physical Characters of the Nations</i> <i>described in the last Section</i>	515
CHAP. XI. <i>Concluding Remarks on the Physical Cha-</i> <i>acters of the American Nations</i>	521
BOOK IX.	
GENERAL SURVEY OF THE CAUSES WHICH HAVE PRO-	
DUCED VARIETIES IN THE HUMAN SPECIES, WITH RE-	
MARKS ON THE ORIGIN OF NATIONS AND ON THE DI-	
VERSITY OF LANGUAGES	525

	Page
CHAP. I. <i>Of the Causes which have given rise to Varieties in the Human Species.</i>	2
SECT. 1. <i>General view of the subject—Opinion of Strabo—Pliny—Of Buffon, and other Modern Writers</i>	525
2. <i>Instances showing the Permanency of Complexion in different Races</i>	532
3. <i>Laws of the Animal Economy in regard to the Hereditary Transmission of peculiarities of Structure</i>	536
4. <i>Theory of the Origin of Varieties</i>	548
5. <i>Instances of Variety in the Breed, arising from the operation of external, chiefly of local causes</i>	558
6. <i>Adaptation of certain Breeds to particular local circumstances</i>	567
7. <i>Of the Relation of particular Varieties of the Human Species to Climates</i>	575
CHAP. II. <i>Recapitulation of the Inferences obtained in the preceding Books, with some General Remarks on the Origin of particular Races</i>	584
CHAP. III. <i>Remarks on the Diversity of Languages</i>	592
SECT. 1. <i>General Observations on the Diversity of Languages—Hypothesis that Languages were originally different—Arguments in opposition to it</i>	592
2. <i>Observations of Julius Klaproth—General and Particular Affinity of Languages—Hypothesis of this Writer</i>	598
3. <i>Survey of the Different Relations of Languages to each other.—Concluding Remarks on the Origin of different Languages</i>	606
Note on the Fifth Book, containing Remarks on the relation between the Indo-European Languages	615

PLATE VII. A native of the Isle of Luzon, from M. Choris's
affording a specimen of the Papuan race.

Vol. i. p. 402.

PLATE VIII. A native of New Holland, from Bion's "Voyage
au Nord de l'Australie".

Vol. i. p. 404.

EXPLANATION OF THE PLATES.

PLATE IX. A native of the Sandwich Islands, from M. Choris's

Vol. ii. p. 396.

PLATE I. Exhibits horizontal Sections of the three principal forms of the human skull; viz. the narrow elongated cranium of the Negro; the broad one of the Mongole and Tungusian, with extended cheek-bones; and the intermediate form, with a more ample forehead, of the European and Georgian Vol. i. p. 165.

PLATE II. Fig. 1. Profile of a Georgian skull, exemplifying the shape common to the European and the western and southern Asiatic races Vol. i. p. 167.

Fig. 2. Profile of a Mongolian skull, exemplifying the shape peculiar to many of the Northern Asiatic Nations Vol. i. p. 168.

PLATE III. Fig. 1. Profile of a Negro (termed Æthiopian) skull Vol. i. p. 168.

Fig. 2. Profile of an Aturian skull, exemplifying the form of the cranium in the aboriginal American nations Vol. i. p. 169.

PLATE IV. Profile of a Bugguess, exemplifying the form of the skull in the nations of the South Sea Islands, Vol. i. p. 170.

PLATE IV. Fig. 2. Skull of an Egyptian Mummy engraved in the Description de l'Egypte . . . Vol. i. p. 325.

PLATE V. Part of an Egyptian Statue in the British Museum, intended to exemplify the physical characters of the Egyptian race Vol. i. p. 321.

PLATE VI. A native of the Sandwich Islands, from a plate in M. Choris's "Voyage Pittoresque autour du Monde" with Captain Kotzebue, being a specimen of the Polynesian race Vol. i. p. 426.

PLATE VII. A native of the Isle of Luzon, from M. Choris, affording a specimen of the Papua race,

Vol. i. p. 462.

PLATE VIII. A native of New Holland, from Péron's "Voyage autour du Monde," a specimen of the Australian race Vol. i. p. 404.

PLATE IX. A native of California, from M. Choris, Vol. ii. p. 396.

PLATE X. Portrait by Van Sand, of the learned Amharic Traveller, Abbas Gregorius, the friend and instructor of Ludolph, exemplifying in a woolly African race, a form of the skull not less ample than that of the European Nations, (*Frontispiece to Vol. I.*)

Vol. i. pp. 309, 328, 357.

PLATE II. Fig. 1. Profile of a Georgian skull, exemplifying the shape common to the European and the western

A CATALOGUE OF NATIONS, or Index of the different Races and tribes of Men, as distinguished by their Languages, nearly in the order in which they are mentioned in this Work, is placed at the end of the first Volume. Nations

PLATE III. Fig. 1. Profile of a Negro (termed Ethiopian) skull Vol. i. p. 168.

Fig. 2. Profile of an American skull, exemplifying the form of the cranium in the aboriginal American nations Vol. i. p. 169.

PLATE IV. Profile of a Burghese, exemplifying the form of the skull in the nations of the South Sea Islands; Vol. i. p. 170.

PLATE IV. Fig. 2. Skull of an Egyptian Mummy engraved in the Description de l'Egypte Vol. i. p. 325.

PLATE V. Part of an Egyptian Statue in the British Museum, intended to exemplify the physical characters of the Egyptian race Vol. i. p. 321.

PLATE VI. A native of the Sandwich Islands, from a plate in M. Choris's "Voyage Pittoresque autour du Monde," with Captain Kotzebue, being a specimen of the Polynesian race Vol. i. p. 426.

INTRODUCTION.

§ I.

THERE is scarcely any question relating to the physical history of mankind, which is fitted to excite greater interest, than the nature of those varieties in structure and complexion which distinguish the several races of men from each other. Our curiosity on this subject only ceases to be awakened, because we have been accustomed to satisfy ourselves with some hypothesis respecting it, either adequate or insufficient to explain the phenomena. But if any person, whose acquaintance with mankind had never extended beyond the people of his own hamlet or native district, were suddenly presented to a tribe of different aspect and complexion;—if, for example, he were carried into the midst of a populous wady in Soudan, at the hour when the sable race recreate themselves with dancing and barbarous music; or, if he found himself surrounded by a horde of the naked and dusky warriors who roam on the banks of the Missouri—it is not to be doubted that he would experience strong emotions of wonder and surprise. It is probable that he would immediately recognise the beings whom he saw as men—he would be aware

of a certain relation between them and himself—but he would be quite at a loss how to account for the striking peculiarities of their appearance.

It will be our principal endeavour in the following pages to throw some light on the nature of these phænomena, and to determine the question, whether all the races of men, which are scattered over the surface of the globe, distinguished as they are in structure and complexion, and differing from each other in languages and manners, are the offspring of a single family, or sprang from several different originals, and are wholly unconnected with each other in descent.

§ II.

AMONG the ancient Greeks and Romans, it seems to have been the universal opinion that every country had its “autochthones,” or indigenous stock of inhabitants. This indeed is the conclusion, which any person who allowed himself to conjecture upon the subject, would naturally be inclined to adopt. The hypothesis that every part of the earth was provided by Nature with a particular stock of human inhabitants, as well as of inferior animals, adapted by constitution to the soil and climate, bears with it, at the first view of the subject, a great degree of probability, and affords a ready solution to several difficulties, which, if we adopt the contrary supposition, create perplexity and doubt. It saves us the trouble, for example, of accounting, or attempting to account, for the

first population of insulated and distant countries. It has often been remarked, as a matter of curiosity and surprise, that whenever the enterprising spirit of modern navigators has brought them to hitherto unknown lands, though ever so remote and difficult of access, they have almost invariably found such countries already stocked with inhabitants. The natives of those distant and insulated tracts have been in general barbarous people, in many instances unacquainted with the art of navigating even the smallest canoes : in others, although they have had vessels of rude construction, they have seldom ventured out of sight of their own shores. When these circumstances are considered, it does not appear easy to explain by what means such savages could have been transported into their distant abodes. Those races who have been discovered thus separated from the rest of mankind, have been found in general to retain no tradition of their arrival from any other part of the world : in many instances indeed they have imagined themselves to be the only human beings in existence, and have been greatly surprised in finding themselves mistaken. Other tribes, not so entirely savage, who have derived from foreign nations the first rudiments of civil culture, have often preserved the remembrance of a time when they emerged from their primitive barbarism, after having remained from ages unknown in a savage state, ignorant of the existence of civil arts and civilized communities, till some stranger, some Hercules or Manco-Capac,

happened to set foot upon their shores. The languages also of savage hordes are often entirely peculiar, and bearing no trace of a common origin with the dialects of nations better known and more extensively spread: they are even sometimes entirely distinct in the different islands of the same archipelago. Many such races have even been found destitute of those common arts and possessions, which it seems difficult to suppose that men could ever have lost, when once acquired, and which they must, as we are ready to conclude, have brought with them, had they migrated from those countries which we generally regard as the cradle of our race. I allude to the possession of bread corn, to the art of domesticating animals, and to the use of milk. All these considerations unite in persuading us to adopt the opinion that each country was provided by Nature with a stock of home-born inhabitants: on that hypothesis they cease to present any difficulty.

The same hypothesis affords an easy and satisfactory explanation of all the varieties of form and complexion which are found in mankind. It accounts for the black colour, the crisp hair, and peculiar features and figure of the African Negro, by representing them as the original characters of the race. The singular physiognomy and proportions, as well as the various complexions of the bald and yellow Mongoles, the pot-bellied Samoiedes, and the red savages of America; the humps, and other well known deformities of the

Bosjesmen, and the hairy limbs and apish expression and figure of the Mallicollese, occasion no further difficulty, as soon as we determine to regard them as the distinguishing traits of so many different races.

The history of languages presents us with phenomena, which are very difficult to explain, when we proceed on the hypothesis, that all the families of men, and consequently all their dialects, sprang from a single origin. The great antiquity of some celebrated languages, carries us back to a very early period in the history of mankind. It would appear probable that the Indo-European, and the Syrian, or Semitic languages, or rather families of languages, as well as the Coptic, or the old Egyptian, of which the Coptic is the descendant and only representative, existed as distinct modes of speech, perhaps as unconnected with each other as they now are, not less than fifteen centuries before the Christian era. Other facts might perhaps be adduced, which tend to prove that languages, since the most remote period of time to which the antiquity of nations and the history of mankind enable us to refer, have not in general lost their distinctive characters or their affinities. How then are we to account for the origin of so many distinct languages as we know to exist, on the supposition that all mankind are descended from one family? On the other hypothesis all these difficulties vanish.

These observations are sufficient to shew, that

the opinion we have been considering has many probable arguments in its favour: it affords the more easy and ready reply to some of the most difficult questions which the history of mankind presents. Whether it is the conclusion at which we are to arrive, after a careful investigation of particulars, does not yet appear. Perhaps indeed this way of getting rid of doubts and perplexities, is more like cutting a knot than unloosing it. An easy and specious solution, is apt however to obtain the greatest number of advocates. Hence the general prevalence of the hypothesis above stated, among the ancients, though it was at variance with the traditions respecting the history of the world contained in their mythology, and hence likewise there are many who are inclined to adopt it in the present day.

§ III.

BUT it is time to inquire what we have to set in opposition to the foregoing considerations. Are any more conclusive arguments to be found on the other side?

It will perhaps occur to many persons, that the opinion which represents mankind as originating from several distinct families, is irreconcilable with the history of our race contained in the book of Genesis. Here then, it may be said, that we have sufficient authority, not only for rejecting all such speculative and uncertain arguments as those we have already adverted to, but even for withholding

our assent from reasonings, which might appear to rest on a more solid foundation, and for acquiescing at once in the opinion, supported by the Sacred Scriptures, that all mankind are the offspring of common parents.

Nothing can be more remote from my intention than to detract from the authority and importance of the sacred writings; but the present inquiry does not appear to me to be one, in which it is necessary to refer to their decision. It relates to subjects which, for any thing that appears to the contrary, are capable of elucidation by the ordinary methods of observation and experience. On those matters which transcend the human faculties, such as the existence and nature of invisible agents, the future state, and the relations of man to the unseen power to which he is accountable for his actions, Providence has condescended to give us, by revelation, such knowledge as it is important for us to possess. On all subjects of this kind the Holy Scriptures are the sole "*principium cognoscendi*;" the only appeal is to them. But in those inquiries, in which the ordinary lights of reason and philosophy are capable of guiding us to the truth, I apprehend that we may safely venture to seek it under their direction. An appeal to the Scriptures on such subjects is rather prejudicial than otherwise, to the interests of religion as well as of science. It evinces indeed an apprehension lest something should be discovered that may prove the

Scriptures to be in error, and implies a secret doubt of their entire truth.

For these reasons it appears better to proceed in the inquiry to which the following pages are devoted, as if the Sacred Records were altogether indifferent to its decision. After arriving at a conclusion on the principal points to be discussed, it will be the most proper time to consider whether the inferences which result, coincide with the accounts contained in the book of Genesis, or are at variance with them. This consideration ought to be taken up in the last instance, and in the mean time, in stating facts, and collecting the inferences which arise from them, we must not be influenced in favour of the conclusion, which we may expect and desire to find established.

§ IV.

NOR can any sufficient and conclusive reply to the inquiry we are entering upon, be derived from researches purely historical. M. Bailh, Sir W. Jones, and other writers on the ancient history of the East, seem to have clearly proved a connexion between the traditions of the most celebrated nations of antiquity, whose descent they hence infer from a common ancestry. Perhaps this inference must be allowed with respect to the Hindoos, the Persians, the Greeks, the Germans, the Slavonians, and the Celts: for in all these instances the connexion of languages renders the mutual affi-

nity of the respective nations extremely probable, if not a matter of absolute certainty. Let us add to the foregoing, the nations of the Semitic family; the Assyrians, Arabs, Hebrews, Syrians, Babylonians, who, though they differ essentially in language from the Indo-European nations, have yet parallel histories or traditions. Add to these even the Chinese, the Egyptians, and Etruscans, which is all that the most sanguine antiquarian can claim; still how can all this be said to afford a proof that all mankind derived their origin from a single stock? How are we to bring within the pale the African Negroes, with their multitudinous jargons; the New Hollanders, the Hottentots, the Esquimaux, the Papuas or woolly-headed tribes who are scattered through the Indian and Pacific oceans? All these nations are destitute of historical traditions, and of all other vestiges of a common origin. With respect to those races of men, whose insulated existence and peculiar aspect and manners are most calculated to excite our curiosity and doubt, investigations purely historical are entirely unavailable.

§ V.

It seems, then, for the reasons we have assigned, that in this inquiry we are not to look for a solution of our doubts in the testimony either of sacred or profane history. It only remains for us to seek an elucidation, through the medium of researches into the natural history of the organized creation, and by considering in detail all the particular points con-

nected with the history of species, respecting which questions can present themselves. In this way of entering upon the subject, the inquiry resolves itself into the two following problems.

1st. Whether, through the organized world in general, it has been the plan or method of Nature to produce one stock or family, in each particular species, or to call the same species into existence by several distinct origins, and thus to diffuse it at once generally, without waiting for the slow method of propagation from a single root? In other words, whether all the organized beings of each particular species can be referred with probability to a common parentage?

2dly. Whether there is more than one species of men in existence? In other words, whether the physical diversities of the several races of men, are such as have probably arisen by variation from one primitive type or form: or must on the contrary be considered as permanent characters, and therefore as constituting distinct species?

I shall proceed in the first place to consider the former of these questions, and in the mean time request the reader, in order that the bearing of this on the principal subject of inquiry may be more apparent, to keep in mind the possibility, that all the physical diversities of mankind may amount only to varieties, and not constitute specific differences; a question which is fully to be considered in its place.

BOOK I.

ON THE ORIGIN AND DIFFUSION OF ORGANIZED BEINGS—CONSIDERATION OF THE QUESTION WHETHER EACH SPECIES EXISTS IN ONLY ONE RACE, OR HAS SPRUNG FROM SEVERAL DIFFERENT ORIGINS.

CHAPTER I.

Introductory Remarks—Opinion and argument of Linnæus on this Subject.

AN investigation of the subject now proposed, will bring before our view a variety of interesting facts and relations. A solution of the questions involved in it, if we could entirely dispel the doubts which hang over them, would not fail to throw light on the history of the world and its inhabitants, and particularly on that of the human race. The inquiry to which we have to direct our attention in the present book is, whether, through the organized world in general, including both of its great departments, it has been the method of Nature to produce at first only one family in each particular species, or to call the same tribe into existence simultaneously in different places, and to diffuse it

over the world for many distinct centres? In other words, whether all the plants and animals of each species respectively, can be referred, with a degree of probable evidence that may be deemed satisfactory in such a question, to a common origin or parentage?

It would be in vain to look for a solution of this inquiry to any arguments *à priori*, or supposed probabilities, founded on the nature and fitness of things, or on what it may appear to philosophers advisable, and what inexpedient for Providence to have performed. Discussions of this kind, though often indulged in, are vague and fluctuating, and incapable of affording us any secure ground to stand upon. The human imagination is almost bewildered, when it attempts to go back to that period which gave origin to the organized world and its inhabitants. So many operative causes, totally different from any that we are now acquainted with, must have been employed in setting on foot that series of phænomena which we term the course of Nature, that we are in danger of losing ourselves in doubts and conjectures when we advert to the subject, and it requires the greatest care to avoid wandering into wild and visionary speculations. It is only by a careful survey of actual facts, and an accurate analysis of their relations, that any light can be thrown on the history of organized species, and the circumstances and conditions of their origin and first existence. In attempting to follow the particular inquiry above suggested, it

will be necessary to take into consideration a great number of facts, to examine accurately their bearings, and to collect the inferences which arise from their comparison.

Linnæus maintained, that in every species of plants as well as of animals, only one pair was originally produced. “Unum individuum ex hermaproditis et unicum par reliquorum viventium fuisse primitus creatum, sana ratio videtur clarissimè ostendere.”

He defended this position by a very ingenious argument, of which the following is nearly the substance:—

Experience proves to us that every family of human or other living creatures has a tendency to multiply, and that the progeny naturally becomes more numerous at every successive generation.

If we follow the history of the race in imagination, tracing the line perpetually onwards, we find the number greater at each subsequent step in the series, than in the step immediately preceding, and we perceive the number of individuals in each kind to be greater to-day than it was yesterday.

If now we turn our thoughts in the opposite direction, and follow the ascending line, we observe each species reduced at every step to a smaller number, many deriving their existence from few, and these few from still fewer: nor is there any term at which we find reason to stop, until we come to a single pair.

Linnæus afterwards proceeds to shew, that Na-

ture has provided such means of multiplication and dispersion, as seem only requisite on the hypothesis adopted by him.

As examples of the multiplication of species, he remarks that one poppy seed has been known to produce a plant containing 32,000 seeds, and one seed of tobacco, in a good soil, to multiply 40,320 fold.

These considerations are not without some degree of force; at least they seem to render one conclusion more probable than another.

But nothing altogether satisfactory can be derived from so speculative an argument.

Perhaps there is no other way of investigating the history of particular species, and throwing some light on the inquiry, whether each tribe is derived from one or from many originals, than to collect the facts which relate to their multiplication and dispersion, and to trace the distribution of genera and species over different parts of the earth. If it should appear, on examination, that animals or plants of each kind have their existence, in general, in those tracts only to which they may probably have wandered, or whither it may be thought that they may have been conveyed, by accidental means, from some single point—a point which may be looked upon as the primitive or original seat of the tribe—there will be a probable reason for believing the whole number belonging to each species respectively, to have descended from a single origin. But if, on the contrary, organized beings

of the same species are met with in places remote from each other, effectually separated by vast distances, or by natural barriers, which the locomotive powers bestowed by Nature on particular tribes cannot have enabled them to pass; and if such examples are not rare exceptions to a general fact, but matters of frequent observation, it must be allowed that creatures of the same kind had probably distinct and separate origins.

It will be necessary to pursue the inquiry suggested by this observation, under separate heads, as it relates to the different orders of organized beings. We shall begin with the dispersion of plants, and proceed then to the lower, and afterwards to the higher departments, as they are termed, of animated nature.

The considerations we have to enter upon respecting plants, are in a great measure distinct from the study of what has been termed their geographical distribution, or their diffusion through particular zones, a subject which of late has so much attracted the attention of philosophical travellers. It is the history of the migrations or dispersions of particular species that we have here to investigate.

CHAPTER II.

Of the Dispersion of the species of Plants.

SECTION I.

Three hypotheses which have been maintained.

THERE are only three hypotheses respecting the origin and diffusion of plants, which can be thought in any degree probable: they indeed comprise nearly all the suppositions that are possible.

Each of them has found some advocates, of considerable reputation, among naturalists.

1. The first and most simple of these suppositions is, that all plants whatever, had the beginning of their existence in one tract of the earth, and that they were all thence gradually dispersed over the world.

Linnæus embraced and defended this supposition, which was indeed more easily reconcilable with the phænomena known in his time, than with the more extensive series of facts since discovered.

Linnæus supposed the habitable world to have been for a certain time limited to one small tract, the only portion of the earth's surface that was as yet laid bare by the subsidence of the primæval ocean. In this fertile spot were congregated the

originals of all the species of plants which have existed on this globe, together with the first ancestors of all animals and of the human race. "In quâ commodè habitaverint animalia omnia, et vegetabilia lætè germinaverint." In order to accommodate the various habitudes of so many creatures, and to provide a diversity of climates suited to their several natures, Linnaeus supposed the tract, in which the creation took place, to have been situated in some warm region of the earth, but to have contained a lofty mountain-range, on the heights and in the declivities of which were to be found all temperatures and every clime, from the torrid to that of the frozen zone.

2. Other naturalists have imagined that each particular species originated, and was diffused from a single birth-place, or primitive centre, but they have supposed that the first seats of the respective tribes were situated in different parts of the earth.

According to this hypothesis, Europe, America, South Africa, Terra Australis, and every other insulated spot, may have been the birth-place, each of a particular number of species.

3. Other writers again have maintained that the vegetable tribes are not to be referred to any limited families or particular centres of propagation; but that in every country where the requisite physical conditions of soil and climate are to be found, Nature has called into existence an indefinite number of individuals; plants of the same

species having been from the first diffused through different regions.

I shall now survey some of the facts actually observed by naturalists, with respect to the dispersion of plants, and endeavour to determine with which of the foregoing conjectures they best agree. It will appear, if I am not mistaken, that there is only one hypothesis out of the three, which is not wholly irreconcilable with the phænomena.

SECTION II.

General facts—Vegetation of distant regions compared with that of Europe.

It was known to Linnæus that plants of the most simple structure are very generally diffused, the same species existing in very distant countries.

He observes that the same mosses are found in Europe and in North America, and says, "*Miratur muscos, fungos, byssum, et mucorem ubique crescere.*"

But a similar remark has been the result of much more extensive observations made by some botanists of the present day, particularly by the Baron Von Humboldt and Mr. Robert Brown, who have discovered it to be a general fact, that among the cryptogamous tribes, which are looked upon as the lowest orders of the vegetable creation, the same species are often to be found in the most distant regions of the world. Thus two

thirds of the Lichenosæ observed in Terra Australis, are also natives of Europe. Of the Musci and Hepaticæ, one third part, and of the submersed Algæ, one sixth are European species; and of the Ferns of New Holland, which somewhat exceed 100 species, twenty-eight have been discovered in other countries.*

It appears that many of the monocotyledonous tribes are likewise widely diffused. Many grasses and cyperoideæ are common to Europe and Terra Australis. Similar observations have been made by Von Humboldt with reference to the botany of South America. It seems that not only the mosses, but likewise many grasses, and cyperoids of that continent, are also natives of Europe.

But a very different result has arisen from surveying the distribution of the more perfect, or of the dicotyledonous plants. The number of such plants, common to distant countries, has been found to be in a very small proportion.

It has been thought by the distinguished philosopher last mentioned, that, in the vegetation of the old and new continents, a law prevails, corresponding with the well-known fact, established by the Count de Buffon, in respect to the distribution of animals to the same regions. The remark of Buffon was limited to mammiferous quadrupeds,

* General Remarks on the Botany of Terra Australis, by R. Brown, F.R.S. &c. Appendix to Flinders's Voyage, p. 591.

and that of Von Humboldt refers only to the dicotyledonous tribes of plants. Of these he has maintained, that all the indigenous kinds in those parts of America, which were visited by him, are peculiar to that continent, and distinct from the species which belong to the torrid regions of Asia and Africa.* He says, that the exceptions to this rule, are plants of the sea-coasts, the migration of which may be easily explained. Nearly to the same purport are the observations of Mr. Brown on the botany of Terra Australis, in comparison with that of Europe. The plants of that new country, already known, amount to about 4,200 species. Of these, 400 are acotyledonous plants, the Ferns being included in that number; 860 are monocotyledonous; the remainder, amounting to 2,900 species, are dicotyledonous.† The cryptogamous plants bear, in the botany of Terra Australis, a proportion much smaller than is common, in the

* See Von Humboldt, "sur les lois que l'on observe dans la distribution des formes végétales;" of which there is an abstract in the Quarterly Journal of the Royal Institution, No. 20.

Professor B. Smith Barton, of Philadelphia, observed, that although America possesses some of the plants of Europe, there is a great multitude of species peculiar to it, and characteristic of its vegetation. Willdenow remarked, that in North America there are many small plants common to that country and to Europe; but he says, that these are chiefly plants belonging to the northern range of European mountains. On the common plants of tropical America and Africa, some remarks will be added in the sequel.

† Brown's Remarks on the Botany of Terra Australis, p. 536.

same latitudes, to the more perfect families.* Now when we proceed to compare the Australian plants, arranged according to these three great classes, with those of Europe, similarly distributed, the proportions of each, which are found to be common to these two regions, are very remarkable.

Of the 400 plants belonging to the first class, namely, the acotyledonous or cryptogamous, upwards of 120, or nearly one-third part, are also indigenous in Europe. Of the second class or monocotyledonous, only thirty species out of 860, or somewhat more than one twenty-ninth part of the whole number, have been found in Europe, and more than half of these are grasses and cyperoids. But of the dicotyledonous plants of Terra Australis, which amount to 2,900 species, only fifteen, or about the one hundred and ninety-third part of the whole number are common to that country and to Europe.†

A diversity not less striking has been discovered on comparing the vegetation of other southern countries with that of Europe and the northern regions. Although the proportion of European plants

* This has been especially remarked in the tract, termed by Mr. Brown, the principal parallel of Australian vegetation.

† Brown, *ubi supra*, p. 590. These proportions will be more striking to the eye when thus expressed:—

Of the agamous plants, the number of species common to Terra Australis and Europe, are to the whole number found in Terra Australis, as

Of the Monocotyledonous as 1 : 29.

Of the Dicotyledonous as 1 : 193.

in Terra Australis is so small, it appears, as Mr. Brown has remarked, to be greater than that which is found in the South of Africa. "The vegetation of the Cape of Good Hope," says this writer, "not only in the number of species peculiar to it, but in its general character, as depending on the extensive genera or families of which it is composed, differs almost as widely from that of the northern parts of the same continent, and the south of Europe, as that of the corresponding latitude of Terra Australis does from the flora of India, and of northern Asia."* The same naturalist has also observed, that the proportion of European species in South America, is probably still smaller than in South Africa, though our means of judging on this point are insufficient. However, some European plants are known to exist in South America.† This brief survey of the more extensive facts lead us to a general observation, which may be thus stated. The most simply organized tribes of plants are very widely dispersed, the same species being often common to distant regions. Plants of the more perfect or more complex forms, are on the contrary confined to particular countries. Tribes of the intermediate class, for as such the monoco-

* Brown, *ubi supra*, p. 591.

† The two Forsters found in Tierra del Fuego, the *Pinguicula Alpina*, *Galium Aparine*, *Statice Armeria*, and *Ranunculus Lapponicus*. Willdenow has remarked that it may be questioned whether these naturalists were not deceived as to the specific identity of some plants with their European analogues, owing to the want of an opportunity of comparing them.

tyledonous may be considered, appear to be neither so extensively spread as the former, nor shut up within such narrow limits as the latter.

SECTION III.

Of the means provided by Nature for the dispersion of Plants — Facts referring to the migrations and colonies of Plants.

BEFORE we proceed to a more particular account of the extension of vegetable species, it is necessary to say a few words on the means which Nature has provided for their dispersion, and on the general facts respecting their distribution already noticed.

For explaining the extensive diffusion of the mosses, fungi, and lichens, Linnæus had recourse to the extreme smallness and lightness of their seeds, which are scarcely visible particles, and may therefore be spread by winds to a distance that cannot be limited. This circumstance seems sufficient to account for the extensive dispersion of plants that belong to the more simple orders. As for the monocotyledonous plants which have been found in countries remote from each other, it has often been observed that a large proportion of them are aquatic tribes, a circumstance evidently of great importance in accounting for their dispersion. The seeds of plants which grow on the sea shores, and in the waters, or even on the margins of rivers, are liable to be transported by currents to

distant coasts, where they vegetate again, if they meet with a congenial soil and climate. But there are many plants of this class, which though common to distant regions, are not aquatic tribes. These, however, are often species of the most simple organization. In plants of this description the specific distinctions are not so strongly marked as in the more perfect and complex forms: they may escape detection; and thus two plants found in distant places may be set down as belonging to one species, when there may exist in reality some minute difference, sufficient to discriminate them.

With respect to the dicotyledonous plants found in distant countries, there is greater difficulty in explaining the fact of their dispersion. There is often in the structure of these plants no peculiarity which accounts for their migration. But many of them belong to kinds which are very generally dispersed through different countries. Therefore, the fact of their discovery in some particular places remote from each other is the less surprising. Thus the dicotyledonous, and indeed nearly all the phanerogamous plants, which are common to Europe and Terra Australis, are such as are also found in America, and several of them exist also in other countries.

To take a more general view of this subject, botanists have been long convinced that the facts connected with the diffusion of plants may often be explained by an inquiry into the structure of their seeds, the lightness of these, and their capa-

bility of transportation by winds; by their texture preserving them from destruction in the waters of the ocean; by the prevalence of particular currents in the air or sea, or by the presence or absence of mountainous barriers, or other obstacles to their dispersion.

It has been observed, that Nature has provided a variety of methods for the diffusion of seeds. Many such have been noticed by naturalists, and their operation has been illustrated by facts well ascertained. The most important are doubtless winds, or rivers, or marine currents. The former convey the lighter kinds of seeds to an incalculable distance, and the latter are well known to transport others occasionally from the most remote countries. Besides these more general causes, it is well known that seeds are often conveyed from foreign countries with the different sorts of grain and of other fruits, which are transported in commerce. Various plants are well known to have been introduced into Europe by the accidental mixture of their seeds with rice brought from the East or West Indies, and those tropical countries have interchanged some of their productions in a similar way. Some seeds are capable of preserving their vitality in the stomachs of birds, and are thus propagated. Such are the misseltoe and juniper.

A number of facts are upon record, which prove that the migration of plants by means of currents in the ocean to distant shores, where, if the climate

is congenial to them, they form new colonies, is not a matter of conjecture, but a thing which actually takes place. Several remarkable instances of this description are recorded in the *Amoenitates Academicæ*.* It is stated, that the seeds of the *Cassia fistula*, the *Anacardium occidentale*, *Mimosa scandens*, *Dolichos urens*, *Guilandina bonduc*, and several other plants of Jamaica and other equinoctial countries, are occasionally collected in the Hebrides.† Many remarks to the same purpose may be found in the works of various authors on botanical subjects.‡

These considerations must induce us to hesitate in admitting as real exceptions to a law so generally prevailing, those anomalous facts which from time to time present themselves.

On the whole, when we consider that the tribes of plants most generally dispersed, are those which are by the nature of their seeds the most easily diffusible; when we reflect on the comparatively limited sphere to which other tribes are in general confined; and, among the exceptions that have been offered to this fact, observe how many admit of a probable explanation, it is easy to discern

* *Amoen. Acad.* tom. viii. *De Coloniis Plantarum*.

† Pennant's *Voyage to the New Hebrides*, 1772, p. 23. Sloane in *Philos. Transact.* No. 223, p. 398. Von Humboldt's *Travels*, i. p. 59.

‡ Refer to *Amoen. Acad.* tom. ii. *De Telluris Habitabilis Incremento*.

the conclusion to which the more general statements connected with this subject lead.

SECTION IV.

More particular inquiry into the manner in which the families of Plants are grouped—Relations between the Vegetation of countries analogous with respect to climate.

We now proceed to inquire somewhat more particularly into the relations which exist between the vegetable productions of countries remotely separated from each other.

It appears, that regions situated under similar latitudes, and resembling in soil, temperature, and local circumstances, display in general a certain analogy or correspondence in their vegetation, but the particular nature of this correspondence or resemblance, it is important to observe.

It may, I believe, be laid down as a general observation, that in very distant countries, where the physical circumstances are similar, the vegetation resembles, but that this resemblance does not consist in the identity of species. In many instances there is found in two such regions only a general analogy in the vegetable forms, certain families or genera in one replacing or appearing in the stead of similar tribes in the other, but the same genus not being common to both. In other instances the genera of plants are more widely spread, and species very nearly approaching to each other have

been discovered in separate countries.* Thus, new species of Pine, of Beech, Elm, Alder, of the Plane and Cornel tree, of Tilia, and Viburnum, are found in America, instead of the Asiatic and European species.† The Dwarf Birch, which in Northern Europe occupies the highest tract on the borders of perpetual snow,‡ is replaced in Tierra del Fuego by the *Betula Antarctica*. There are some examples in which the identical species have been recognized in very remote countries, but, among perfect plants, these instances are comparatively very few, and many of them admit of explanation.

The three great southern continents, South Africa, Terra Australis, and South America, afford some of the most curious examples of these relations. A certain analogy has been observed in the productions of all these countries, but there is by far the most decided resemblance between the vegetation of South Africa, and that of Terra Australis, under the same parallels.§

* See Sprengel's *Elements of the Philosophy of Plants*, chap. iv. and v.

† See a table of these correspondences in Wildenow's *Principles of Botany*, p. 406.

‡ Von Buch's *Travels in Scandinavia*.

§ M. Leschenault was struck with this resemblance. He has, in the following passages, described the general character of the vegetation of New Holland: "Si le règne animal dans la Nouvelle Hollande, offre des particularités remarquables qui pisolent, pour ainsi dire, de celui des autres parties du monde, le

But even here the correspondences are of the kind above indicated. There are, indeed, very

autres. Le règne végétal n'a point un caractère moins distinctif. Ce caractère tient non seulement aux différences botaniques, mais encore à une physiognomie naturelle, qui sera remarquée des yeux les moins observateurs. Les parties méridionales de l'Afrique sont les seules, à la végétation desquelles on puisse comparer celle de la Nouvelle Hollande : par les mêmes parallèles, on retrouve ces innombrables légions de bruyères et de protées, qui renferment plusieurs arbustes remarquables pour leurs formes gracieuses et délicates, et qui parent la stérilité de l'un et de l'autre climat.

“ Mais dans tous les lieux que nous avons visités, et surtout sur la côte occidentale de la Nouvelle Hollande, nous n'avons retrouvé dans les grandes masses, ni la majesté des forêts vierges du nouveau monde, ni la variété et l'élégance de celle de l'Asie, ni la délicatesse et la fraîcheur des bois de nos contrées tempérées de l'Europe. La végétation est généralement sombre et triste : elle a l'aspect de celle de nos arbres verts ou de nos bruyères : les fruits pour la plupart sont ligneux ; les feuilles de presque toutes les plantes sont linéaires, lancéolées, petites, coriaces et spinescentes. Cette contexture des végétaux est l'effet de l'aridité du sol et de la sécheresse du climat ; c'est à ces mêmes causes qu'est due sans doute la rareté des plantes cryptogames, et des plantes herbacées. Les graminées qui ailleurs sont généralement molles et flexibles, participent ici de la rigidité des autres plantes. La plupart des plantes de la Nouvelle Hollande appartiennent à des genres nouveaux, et celle qui se rattachent à des genres déjà connus, sont presque autant d'espèces nouvelles. Les familles naturelles qui dominent, sont celles des protées, des bruyères, des composées, des légumineuses, et des myrthoïdes. Les plus grands arbres appartiennent tous à cette dernière famille, et presque exclusivement au genre *Eucalyptus*.

“ Les familles, dont je viens de faire mention, sont très abondamment repandues, et se partagent une grande partie de la vé-

characteristic, and extensively diffused tribes in either country, which are wholly wanting in the other. Such are in New Holland the genus *Eucalyptus*, and the leafless *Acaciæ*, each consisting of about 100 species already known. These, taken together, comprise, in respect to numbers, and the vegetable matter they contain, nearly one half of the whole vegetation of *Terra Australis*. No traces of them have been found in South Africa. That country, on the other hand, has several genera, very characteristic of its vegetation, which are entirely wanting in New Holland. In other instances certain families in one region replace analogous tribes in the other. The *Epacrideæ*, 140 species of which are nearly confined to *Terra Australis*, appear there as substitutes for the *Eri-cææ*, a numerous and diversified order in South Africa. Other families, and even some genera of plants, are divided between the two continents, but there are very few species which are common to both.

gétation. Cette observation prouve jusqu'à quel point le système des familles naturelles est d'accord avec la marche de la nature, qui rarement isole les espèces, mais au contraire, les réunit, presque toujours en grand nombre, sur un même sol et dans un même climat."

We are informed by Mr. Brown, that the general character of South American vegetation probably recedes more from the Australian than the latter does from the South African. Yet, in Chili and Tierra del Fuego, there are certain tribes of plants nearly corresponding to some Australian genera.—*Brown's Remarks*, &c. p. 589.

The distribution of genera and species belonging to these families, has besides something in it very remarkable.

In many instances it appears that the plants belonging to certain natural families are placed in particular groupes, each having a centre, or focus, where the genera and species comprised in it are in the greatest number, and display the characteristic form of the order in the greatest perfection. At a distance from these central points the common type becomes gradually evanescent, and the number of species and of individuals diminishes. These centres of peculiar vegetation in New Holland occur almost entirely between the 33rd and 35th degree of southern latitude, and principally at the two opposite extremities of this tract, that is, near the eastern and western coasts. These points may therefore be termed the two principal foci of Australian vegetation, each of them possessing certain genera, which are almost peculiar to it.

Many of the preceding observations may be illustrated by referring to the distribution of the extensively diffused and remarkable family of plants termed *Proteaceæ*.* This family is almost entirely confined to the southern hemisphere, where it is very extensively spread; the few species which are

* Most of the preceding facts referring to Australian vegetation are taken from Mr. Brown's Remarks, in his appendix to Flinders's Voyage. The following, relating to the distribution of the *Proteaceæ* are mentioned in his paper in the *Linnean Transactions*.

found to the northward of the equator exist within the tropic. These plants are generally, though very unequally, spread over all the great southern continents; they have been observed also in the larger islands of New Zealand and New Caledonia, but hitherto in none of the lesser ones. In America they have been found in Tierra del Fuego, in Chili, Peru, and in Guiana, but, in this continent the number of their species is comparatively small, and their organization little varied; the American tribes of *Proteaceæ* have much greater affinity with those of New Holland than of Africa. In Africa the *Proteaceæ* occur in great abundance and variety about the Cape, in the same parallel which contains the principal number in Terra Australis. But, in the latter country, they have their chief seat: here more than 400 species belonging to this order have been already found. They abound at the two principal foci, but diminish very remarkably in the intermediate space. Those genera of Australian *Proteaceæ*, which bear the nearest resemblance to the African tribes, of the same order, exist on the western coast, and those which most assimilate to the American tribes, on the eastern. Two genera only of this order are found in more than one of the southern continents, but particular species have a very limited extent: they are not only distinct in the tracts separated by seas, but not one species has been found common even to the eastern and western shores of New Holland.

There are several other families principally be-

longing to Terra Australis, which are partially dispersed over the southern countries separated from that continent by seas. In some instances the branches of these Australian families are found in the islands of the Indian Ocean: in some others they are spread in an opposite direction over the isles of the Pacific, and on the shores of South America. Several species of Epacrideæ, in New Holland a very numerous family, are found in New Zealand; a few of them in the Society, and even in the Sandwich islands: only one plant of this family, an unpublished species, exists in Tierra del Fuego.* The leafless Acaciæ are very abundant in Terra Australis at the two principal foci. One hundred species are found in that country, and are peculiar to it: only seven other species are known, of which five are natives of the tropical islands of the southern hemisphere, and one of the Sandwich isles, where it forms the largest tree.

These observations seem to lead us to the conclusion that Nature has often deposited plants upon different parts of the earth, arranged, if we may use the expression, according to their natural affinities; particular families having certain centres, or principal foci, where the plants that belong to them have been produced in the greatest number of individuals and variety of species.

In countries, situated alike with respect to soil and climate, but separated by remote distances, or

* Brown's Remarks, p. 565.

by natural barriers, which cut off all communication, although Nature has sometimes reproduced similar types or forms, the affinity does not extend, in general at least, to the reproduction of the same identical species.

Where the same species are found in two separated countries, it is generally, under circumstances which lead us to suspect dispersion from one point.

SECTION V.

Phænomena relating to the Vegetation of Islands.

THE general bearing of the facts we have already stated, disposes us to adopt the opinion, that when the same species of dicotyledonous plants are found in two distinct countries, the stock has been communicated from one place to the other. The phænomena which relate to the vegetation of islands, seem to point towards the same conclusion.

We may observe, in the first place, that in small islands, very remote from continents, the species are very few, and sometimes quite peculiar. Thus in Kerguelen's land, or the Island of Desolation, when visited by Captain Cook, although there was soil sufficient to afford a considerable verdure, it was found that this appearance entirely depended on one small plant, and the whole flora of the land contained only sixteen or eighteen plants, including some sorts of mosses, and a species of lichen. There was not the least appearance of a shrub in the whole country, nor were there any animals ex-

cept seals and marine birds. These animals were only visitants, but all the plants were thought by Mr. Anderson, from whom we have the account, to be peculiar to the island.*

Easter Island, which, except Kerguelen's land, is perhaps the most remotely situated in the ocean, has, according to Dr. J. Reinhold Forster, a flora consisting of only twenty species. Many of the plants included in this small number, are esculent vegetables, and were probably imported by the natives from other islands in the same ocean; they are at least similar to the plants cultivated at Otaheite and other islands of the Pacific Ocean.†

It seems that islands but newly emerged from the ocean, obtain peculiar plants. In Savage Island, a low flat land of small extent in the Pacific Ocean, elevated but a few feet above the level of the sea, and consisting of bare coral rocks, Forster found some new plants, which on the outskirts of the island, grew on the cavities of the coral without any soil.‡

It may be observed here, that the plants found on islands, where the species are peculiar to those islands, are generally akin to the genera prevailing on the neighbouring continents. This observation is connected with a series of facts already considered, namely, those relating to the distribution

* Anderson's Observations on Cook's Last Voyage, vol. i. pp. 84, 85.

† Dr. J. R. Forster's Observations.

‡ Dr. J. R. Forster, *ubi supra*.

of species round a common centre, the principal seat of each genus.

But secondly, the flora of islands, as far as it is not peculiar to them, contains in general the same species which are found on the nearest main-lands, and which therefore can most readily have been communicated to the islands so situated. The *Araucaria excelsa* of New Caledonia has been found in New Holland. It inhabits also the intermediate Norfolk Island, and the part of New Holland, where it has been discovered, is the shore opposite to the islands before mentioned. The *Goodenia littoralis*, which grows on the southern shores of Terra Australis, has been found on the opposite coast of South America; it is also in New Zealand, which is situated between these shores.*

The different groupings of islands situated in the great Southern ocean, which ocean is bounded by the shores of America and of Eastern Asia, contain plants corresponding in general with those of the continents, and chiefly with those of the main land to which respectively the islands most nearly approach. The easternmost islands contain more plants of American families or species, and the western, of those tribes peculiar to India. There are some exceptions to this observation, but they are of a kind, which, when duly considered, confirm the opinion that the islands derived their respective vegetation from the continents. But for

* Brown's Appendix to Flinders.

an account of the particular circumstances alluded to, I must refer to Dr. Forster's observations on the productions of the Pacific ocean.

In other seas, the phenomena of the vegetable creation are of a similar kind. Malta and Sicily have some plants which belong to Europe, and others of an African stock. The vegetation of the Cape de Verd Islands, is intermediate between the flora of the Canary isles, and that of the African coast. The Canary isles, according to Von Humboldt, contain plants found in Portugal, in Spain, in the Azores, and on the north-west coast of Africa. Yet a great number of species, and even entire genera, are peculiar to Teneriffe, to Porto Santo, and to Madeira.*

SECTION VI.

Recapitulation and Conclusion.

LET us now compare the results of this inquiry with the three hypotheses laid down in the outset respecting the origin of plants.

In the first place it seems evident that the hypothesis of Linnæus, which represents all plants whatever as originating in one common centre, must be entirely given up; since the propagation of the various tribes of plants certainly issues from a number of different points, and these, until some reason appears to the contrary, must be looked upon as so many different centres of the vegetable

* Baron A. Von Humboldt's Personal Narrative, vol. i. p. 270, of the translation.

creation. We have seen that various parts of the world, remotely separated, possess, each of them, a vegetable kingdom, in a great measure at least, peculiar and distinct from the productions of other countries.

The same series of facts is equally conclusive against the third hypothesis; since the distribution of plants is local, and confined to particular districts, until their seeds are transplanted elsewhere. It therefore cannot be allowed, that the species of plants are universally diffused according to the agreement of climates, and other physical circumstances, with their organization. This hypothesis, indeed, seems to be fully refuted by the following consideration.

Numerous instances have occurred, in which plants by transportation have acquired a new country.* The soil and climate being perfectly congenial to them, they have spread abundantly in regions where they are known to have become naturalized at a late period. This proves that it has not been the method of Nature to produce plants of the same species, wherever the conditions exist which are favourable to their life and propagation, as some late writers have conjectured. The fact just mentioned is parallel to that of the multiplica-

* Linnæus remarks, that the *Erigeron Canadense* was first introduced into the gardens near Paris from Canada. The seeds being accidentally scattered by the wind, this plant was, in the course of a century, dispersed over all France, Italy, Sicily, Belgium, and Germany.

tion of oxen brought from Europe into Paraguay, where there are now herds which cover plains of vast extent.

It appears then on the whole, that the phenomena connected with this subject are reconcilable with only one hypothesis, and that is, that the vegetable creation was originally divided into a number of different provinces. Each country, perhaps each chain of mountains, had its peculiar tribes, which at first existed not elsewhere. This conclusion results from the facts we have pointed out; first, from the general difference in the species belonging to each of the great continents; a difference which is strongly marked, and almost without exception in respect to those tribes of dicotyledonous plants, which constitute the chief mass of the vegetation in each country, and which, by the nature of their seeds, or their habitation at a distance from the sea coast, are removed from the chances of transportation. Secondly, from the arrangement of whole dynasties of gregarious plants round some particular foci, the individual species being spread out in various directions with reference to the central point. The same conclusion is further supported by the observation that some particular plants have an entirely local and insulated existence, being found naturally on some particular mountain, and never elsewhere. The Cedar of Lebanon, and the *Melastoma Setosum*, which grows on the volcano of Guadaloupe, have been cited as examples of this description, as well as the *Disa*

Longicornis and the Serapias Tubularis, which were found by Thunberg on the Table Mountain near the Cape, and have never been observed in any other place.* It is impossible to reconcile these facts with any other hypothesis than that which supposes the vegetable creation to have taken place from distinct centres, each of which was the original seat of a certain number of peculiar species.

SECTION VII.

Exceptions to some of the foregoing Observations.

BEFORE we take leave of this subject it is necessary to advert to a series of facts displayed by a comparison of the vegetable productions of some inter-tropical countries, which seem to present some remarkable exceptions to the laws of distribution prevalent in other parts of the world. I allude to the botanical discoveries made during the late expedition to the river Zaire, in Africa, and to the observations on them by Mr. Robert Brown.

Upwards of 600 plants were collected by Professor Christian Smith in the neighbourhood of the river Zaire. This collection, together with that of Smeathman, from Sierra Leone, have furnished Mr. Brown with the basis of a comparison between the vegetation of Africa and other tropical countries.

* Sprengel, *ubi supra*. Willdenow, p. 416. Tournefort gathered the *Origanum Tournefortii* on a single rock in the island Amorgos, and Sibthorp found the same plant on that spot, and never elsewhere.

The result obtained is, that about one-twelfth of the whole collection of plants from the Zaire consists of species, which are also met with either in India, or on the opposite shores of Guyana and Brazil; and it is remarkable, that in this aggregate the more perfect plants are in the greatest proportion. The numbers of such species are as follows:—

22 *species* are enumerated common to equinoctial Africa, India, and America.

13 *species* common to Africa and America, not found in India.

17 *species* common to Africa and India, not found in America.

It seems that most of these plants are strictly equinoctial, and that they are such whose introduction cannot be ascribed to human agency. How then are we to account for their dispersion in countries so separated? Must we suppose that Nature has proceeded in supplying the inter-tropical regions with plants, according to different laws from those of which the prevalence has been inferred, after an extensive survey of the vegetable tribes in other parts of the world? It seems more probable that the true solution of this apparent anomaly is to be found in the transportation of seeds from one opposite shore to another, by means of currents in the inter-tropical seas. This opinion is strongly supported by several observations on the nature and habitations of these plants. It has been remarked by Mr. Brown, that most of those plants in the African collection, which are

common to Africa, and other countries, were only seen on the lower parts of the river Zaire, where they form but a small part of the entire vegetation; that most of the dicotyledonous species in the list are such as produce seeds capable of retaining their vitality a long time in the currents of the ocean, particularly those belonging to the orders of Malvaceæ, Convolvulaceæ, and Leguminosæ, two of which are among the most numerous families on all equinoctial shores.

On reviewing all the facts above noticed, and taking into consideration the small proportion of these dispersed dicotyledonous plants, and the circumstances connected with their dispersion, we are strongly disposed to believe that they furnish only apparent exceptions to a law which so generally prevails in this part of the vegetable creation.*

* Perhaps an apology may be due from me to my readers for having said so much upon a subject on which I cannot hope to throw any new light, and can only repeat the facts collected and stated by others. I can only allege in excuse, that I am not aware that the subject of the foregoing and following sections has ever been surveyed in the same point of view in which I have considered it. No writer, as far as I know, has yet brought together the various facts which are likely to illustrate the distribution of organized beings. I found it indispensable to the future progress of my work to consider the question discussed in this chapter, and I could not dismiss it more briefly, or refer the reader at once to the authors from whom I have drawn my information, because they would not have found the facts stated in that order and relation which fully display the inferences I wish to collect.

CHAPTER III.

Of the Dispersion of Animals.

SECTION I.

Of the Distribution of Insects.

THE local existence of animals of the inferior classes, or those of the most simple organization, is so closely connected with that of the plants which afford them sustenance, and in many instances furnish their only abode, or nidus, that we might, previously to any inquiry into the fact, expect to find the same laws prevailing in this part of the animal creation, as in the dispersion of vegetable tribes. This conjecture has been confirmed by the most accurate researches, which have yet been made into the subject. We shall besides find reason to conclude, that the same analogy prevails not only in those tribes which are so closely related to the vegetable kingdom, but through all the great departments of the animal creation.

After surveying the distribution of plants, we are naturally led to the consideration of insects, which are more especially limited in the sphere of their existence, by the presence of particular trees,

or other vegetable productions. But in this part of the inquiry we are saved the necessity of entering into any particular discussions respecting the habitations of individual tribes, the subject having been fully investigated by the celebrated Mr. Latreille, who has availed himself of the most extensive sources of information. I shall in this place be satisfied with citing the general conclusions which this writer has given in his essay on the distribution of insects and arachnoides.

1°. “ La totalité, ou un très grand nombre des arachnides et des insectes qui ont pour patrie des contrées dont la température et le sol sont les mêmes, mais séparés par de très grands espaces, est composée, en général, d'espèces différentes, ces contrées fussent elles sous le même parallèle. Tous les insectes et arachnides qu'on a rapportés des parties les plus orientales de l'Asie, comme de la Chine, sont distincts de ceux de l'Europe, et de l'Afrique, quelles que soient les latitudes et les températures de ces contrées Asiatiques.”

2°. La plupart des mêmes animaux diffèrent encore spécifiquement, lorsque les pays où ils font leur séjour, ayant identité de sol et de température, sont séparés entre eux, n'importent les différences en latitude, par des barrières naturelles interrompant les communications de ces animaux ou les rendant très difficiles, telles que des mers, des chaînes de montagnes très élevées, de vastes déserts, &c. Dès lors les arachnides, les insectes,

les reptiles même de l'Amérique, de la Nouvelle Hollande, ne peuvent être confondus avec les animaux des mêmes classes qui habitent l'ancien continent. Les insectes des Etats-Unis, quoique souvent très rapprochés des nôtres, s'en éloignent cependant par quelques caractères. Ainsi ceux du royaume de la Nouvelle Grenade, du Pérou, contrées voisines de la Guiane, et pareillement équinoctiales, diffèrent néanmoins en grande partie, de ceux de la dernière, les Cordillères divisant ces climats. Quand l'on passe de Piémont en France par le col de Tende, on aperçoit aussi un changement assez brusque. Ces règles peuvent souffrir quelques exceptions, relativement aux espèces aquatiques. Nous connoissons encore des insectes dont l'habitation s'étend très loin. Le papillon du chardon (cardui) ou la belle dame, si commun dans nos climats, et même en Suède, se trouve au Cap de Bonne Espérance. La Nouvelle Hollande offre aussi une espèce qui en est très voisine. Le sphinx du *néron*, le sphinx *celerio*, ont pour limites septentrionales notre climat et pour bornes méridionales, l'isle de France. Parmi les insectes aquatiques, le *dytiscus griseus*, qui vit dans les eaux de la cidevant Provence, de Piémont, &c., n'est pas étranger au Bengale."

It appears from some further observations of Mr. Latreille, that the distribution of genera, and the species composing them, in this department of the animal creation, bears some analogies to those general facts, which we have observed in the

dispersion of plants, and to the laws which prevail in other departments of zoology. The author was aware of this relation. He remarks, for example, an approximation in the entomology of America to that of the Austral countries, and the eastern parts of Asia. But this observation refers to genera, of which particular species are the peculiar stock of each country, and not to any example in which the same species is found in separate regions. The insects of New Holland are often of the same genera with those of the Moluccas, and the south-eastern parts of India: they have much affinity with those of New Zealand and New Caledonia, and generic relations, as we have observed, with those of America: yet the entomology of New Holland has, according to Mr. Latreille, a peculiar type.*

SECTION II.

Of the Dispersion of Birds.

IN respect to the powers of locomotion and migration, which is the point of view in which we are now considering animals, there are no creatures so nearly allied to insects as birds. We shall therefore say a few words on the dispersion of this class of animals, before we proceed to other tribes which have more confined powers.

* Introduction à la Géographie générale des Insectes et des Arachnides, &c., par P. A. Latreille. Mémoires du Muséum d'Histoire Naturelle, tome iii.

Some birds are endowed with such powers of locomotion, that there are scarcely any natural barriers to their capability of migration. Accordingly such species are dispersed, as far as the climates extend which they are by nature fitted to inhabit. Some of them, as, for example, several of the vulture tribe, may almost be termed cosmopolites. But the most general fact, with respect to the local existence of birds appears to be, that particular species are confined to a very limited range, and this is especially the case with those which have heavy bodies and weak powers of flight. Such are the various species of the genus *Psittacus*, or Parrot, of which the species at present known are said to amount to 239. These are separated into two principal divisions: those of the Old and of the New World. Among the former are the Lories, which inhabit New Guinea; the Moluccas, and other eastern islands. None of this tribe are found in America. Owing to the powerless flight of these birds, it has often been observed, that one island of an archipelago contains a different species from others in the same groupe.*

* Remarks on the History and Distribution of the genus *Psittacus*, or Parrot, in the fourteenth number of the Edinburgh Philosophical Magazine, May, 1822.

SECTION III.

Of the Dispersion of Marine Animals.

THE history of the various tribes which inhabit the waters of the ocean, including the marine mammalia, as well as fishes and molluscæ, is at present the most imperfect department of zoology. The facts which it comprises have often been reported on the faith of ignorant and incompetent witnesses. The descriptions of particular animals are vague and incorrect, and the species undefined. Hence it is, that this department of the animal kingdom contains so many species which are said to be cosmopolites, or universal inhabitants of all the regions in the ocean. The *Balaena Mysticetus* has been supposed by naturalists to be equally indigenous in the frozen seas of Spitzbergen, and among the antarctic ices. The *Phoca Vitulina*, or Sea Calf, is reported by various writers on zoological subjects, by the compilers of systems of natural history, to inhabit not only the frozen regions in the neighbourhood of either pole, but also the seas of the torrid zone. The same animal is also said to swim in the waters of the Caspian, and what is still more strange, to thrive, although a native of salt water, in the fresh water lakes of Baikal, Ladoga, and Onega. Some writers have thought it very probable that these animals made their way from the Euxine into the Caspian Sea, by diving through subterraneous conduits which

they have fancied to exist, and furnish a communication between those waters. The same writers have found no difficulty in allowing that these phocæ may have found their way up the great rivers of Asia to the elevated lakes in the steppe of eastern Tartary, forgetting that there would remain several hundreds of miles of this journey to be accomplished by land, for which a finned animal must needs be ill provided.

But the truth is, that the instances of such extensive dispersion of marine animals, have been reported entirely on the authority of ill-informed persons. This subject has been carefully investigated by two distinguished naturalists, Le Sueur and Péron. The result of their examination is, that the identity of species among the oceanic tribes so widely dispersed, rests on the most questionable grounds, and that, whenever an opportunity has occurred of making precise observations, very important and truly specific differences have appeared to exist among them. It seems, that the Arctic Ocean does not contain one tribe well known and described, which is not specifically distinct from those animals most analogous to it, in the Antarctic Seas. This remark has been applied more particularly to the cetaceous and phocaceous tribes. Under the name of *Phoca Ursina*, or Sea Bear, more than twenty species are described by various authors, which differ from each other, not only in colour, the form, size, and position of

their fins, &c. but even in the number of their teeth, and the presence or want of ears. The specific identity of the *Phocæ Vitulinæ*, or Sea Calves, rests on descriptions the most vague, and of very doubtful authority. It appears that Steller and Fabricius have described two different animals under the term *Phoca Leonina*, and that three other tribes have been subsequently confounded with the species thus established. On this comparison the authors above-mentioned conclude with the following comment: "We now venture to ask, if in respect to the largest *Phocæ* of our hemisphere, there is so much confusion even in the writings of the most celebrated naturalists, in how many greater errors is it not likely that the history of those innumerable marine amphibiae is involved, which fill all the regions of the Antarctic Ocean? How can we admit these unauthorized and improbable instances of identity in species, which are to be found among them, and which have become registered in so many works? Observed even to the present day, almost exclusively by men, who are strangers to all the principles of science, to all the distinctions which it exacts, to all the comparisons which it demands, the majority of these animals are indeterminable with respect to their species. Among all those which we have been able to examine with our own eyes, or with regard to which it has appeared to us possible to pronounce with certainty, there is not a

single animal which is not distinguished by essential characters from the analogous species in the northern seas.”*

Similar conclusions have been adopted by the same naturalists respecting the lower departments of marine animals. They begin by asserting a just claim to attention on this subject. “Nobody has collected a greater number of animals than we have done in the southern hemisphere: we have observed, described, and drawn figures of them, all in their native spots: we have brought with us many thousand species into Europe, where they are deposited in the museum of natural history at Paris. Let these numerous animals be compared with those of our hemisphere, and the problem will be solved, not only with regard to species of a more perfect organization, but even with respect to all those which are of more simple structure, and which, on that account, might seem likely to have received from nature less variety of form. Let those who doubt, examine not merely the species of *Doris*, of *Aplysia*, of *Salpa*, of *Nereis*, *Aphinome*, *Amphitrite*, and that multitude of molluscæ and worms, which offered themselves successively to our observation; let them descend also to the *Holothuriæ*, to the *Actiniæ*, the *Beroes*, the *Medusæ*; let them extend their researches even to those shapeless Sponges, which all agree in regarding as the lowest term of degradation, or

* M. M. Péron et Le Sueur sur les Habitations des Animaux Marins. Annales du Museum, tom. xv.

rather of simplicity in animal structure; among all this immense assemblage of Antarctic animals, it will be found, that there is not one which exists in the seas of the northern hemisphere.*

It is further to be observed, that the maritime animals, which possess little power of self-extension, prevail within narrow bounds in their respective latitudes. The numerous animals which compose the family of Medusæ, are confined to a very limited extent. Each species is found in particular districts, in astonishing abundance, and is seen in no other place.* The multitude of Testacea which adorn the shores of the Austral seas, obey the same laws. The *Haliotis Gigantea* and the *Phasianellæ*, which are so abundant on certain spots of the coast of Van Diemen's Land that a vessel might easily be loaded with them, dwindle away both in number and magnitude towards the west; they are scarcely found at the land of Nuytz, and at King George's Sound no longer exist. The shores of Timor present an immense multitude of various and beautiful Testacea. Not one of these extends so far as the southern coast of New Holland.†

From all this, it may be inferred, that the law which prevails in all the lower departments, as we commonly term them, of the animal creation, is

* Histoire de tous les Animaux qui composent la Famille des Méduses, par M. M. Péron et Le Sueur. Annales du Muséum, tom. xiv.

† Sur les Habitations des Animaux Marins, *ubi supra*.

similar to that which we before traced through the vegetable world. Each species has a local existence, and seems to have been originally produced only in one spot.

SECTION IV.

Of the Dispersion of Quadrupeds and Reptiles of the Land—Division of the Earth into Zoological Provinces.

IN pursuing the same inquiry with reference to quadrupeds and reptiles which inhabit the land, we find the questions which present themselves more determinable, and incumbered with fewer difficulties. These animals by their large bulk are easily observable; they do not elude our view as the Phocæ and Cetacea, which are concealed by the waters of the ocean; the extent of the distribution of particular tribes, is therefore, in general, tolerably well known. Nor are we subjected in this instance to the same cause of ambiguity, which sometimes throws a doubt on the genealogy of particular plants, the seeds of which are liable to be carried down by rivers, and transported by marine currents to distant shores, where they vegetate and establish new colonies. In comparing the wild quadrupeds which inhabit separate countries, we are enabled to draw inferences from the facts which present themselves with greater certainty; and hence the conclusions which, with respect to dicotyledonous plants, could only be stated as highly probable, or at most as general laws, may be main-

tained almost, if not entirely, without exception, in the case of land-quadrupeds.

Animals of this class are limited in their dispersion, within the climates suited to their existence, by natural barriers, which prevent their further progress. The limits which most effectually confine the species of quadrupeds, are the branches of the ocean which intersect continents, and separate islands. Hence by a reference to the geographical site of countries, we may divide the earth into a certain number of regions, fitted to become the abodes of particular groupes of animals; and we shall find on inquiry, that each of these provinces, thus conjecturally marked out, is actually inhabited by a distinct nation of quadrupeds, if we may use that term.

In the first place, it has been often observed that the continents of the Old and the New World approximate to each other, towards the north: that the narrow straits which separate them, are frozen over in the winter, and that the distance being further lessened by intervening islands, a passage from one continent to the other becomes practicable, to such animals as are fitted to endure the intense cold of the Arctic circle. The Arctic region, in fact, is one of the provinces of the animal kingdom: it contains tribes of quadrupeds common to both the great continents.

2nd. But the temperate zone, to the northward of the equator, is divided by the ocean into two great

districts. The temperate region of Asia and Europe affords a practicable passage for animals from Europe as far as the shores of the North Pacific. This ocean, however, sets an impassable barrier: accordingly the same tribes are found to be spread from the western to the eastern countries in the old continent; but the quadrupeds which inhabit a temperate climate in America are peculiar races.

3rd. The equatorial region contains three extensive tracts, separated from each other by wide seas. I allude to the tropical parts of Africa and of America, and to continental India. Accordingly there are three distinct nations of tropical quadrupeds, viz. the American, the African, and the Indian.

4th. The Indian isles, particularly the Sunda and Molucca islands, which are separated from the continent of Asia, may be thought, by their geographical situation, to form a distinct region. In fact, they contain many peculiar tribes of animals, different from those of the Indian continent, and in some respects approaching in their general character to the African tribes.

5th. Beyond the Indian archipelago we find a remarkable country, extremely fertile in vegetable productions. It is termed, from the inhabitants, Papua, that name including New Guinea, New Britain, and New Ireland. This continent, for such it may be called, with the islands which are formed by a continuation of its mountain chains; viz. the Archipelago of Solomon's Islands, the New Hebrides, and Louisiade, together with the more

remote groupes of isles in the great Southern Ocean, may be considered as forming one zoological province. It is remarkable that all this extensive region seems almost wholly destitute of native warm-blooded quadrupeds, except a few species of bats, and some small domesticated animals in the possession of the natives.

6th. Beyond this region, upon which, though appearing well fitted to be the receptacle of numerous races, Nature has refused to bestow any four-footed inhabitants, we find, what is, on this account, the more remarkable, an extensive country containing many indigenious tribes of very peculiar description. In no part of the world has the animal creation so distinct and singular a character as in Terra Australis.

7th. The Southern extremities of America and Africa contain countries situated under a temperate climate, nearly insulated, as respects the quadrupeds inhabiting them. These regions, as we might expect, contain peculiar tribes.

I shall take a general survey of the tribes inhabiting these different provinces of the animal world, without confining myself precisely to the order in which I have just enumerated them.

SECTION V.

Zoological character of each of the Provinces above described.

I. THERE is no other great department of the world so much insulated, or cut off from communi-

cation with the great continents, as Terra Australis, which includes New Holland and the adjacent islands to the southward; and there is no region which has so peculiar a stock of animals. It contains several entire genera of quadrupeds, which have not been discovered in any other part of the world; and what is very remarkable, most of the tribes peculiar to New Holland, though very different from each other, have some striking characters of organization, which are common to all of them. The great class of warm-blooded quadrupeds, or quadrupeds with a double heart and double circulation, was assumed by Linnæus to be, without exception, viviparous and mammiferous. Hence it received the denomination of mammalia, which has been generally adopted by naturalists; but is liable to objection, since its application to the whole class of warm-blooded quadrupeds is founded on an opinion assumed without proof. It is taken for granted, that the peculiarity which gives rise to the term Mammalia, has been, universally, conjoined with another more important one, by which the class is constituted; whereas it is very possible, though Linnæus was not aware of any such fact, that Nature may, in some instances, have separated these characters. It appears, indeed, that a tribe of animals has been discovered in New Holland, which furnishes an example of this separation. Now, if the great department of quadrupeds with warm blood be distinguished, as a particular class, by this circumstance only, by

having warm blood, and the structure on which this depends, namely, a double heart, and corresponding organs of respiration, it will be proper afterwards to subdivide the class thus constituted with reference to the mode of reproduction. The first order may contain those tribes which are oviparous, or ovo-viparous; and, like other oviparous animals, unprovided with organs for suckling their young. The second may comprise such as produce their offspring in an immature state, and keep them for a time attached to their bodies, chiefly in abdominal pouches, which Nature has provided for this purpose. These animals have been termed the marsupial tribe. The third order must receive all those which produce their offspring in what may be termed a mature state.

The first of these orders, or families, has received the name of Monotremes, which is founded on a principal circumstance in their structure. This singular tribe is, as far as we know, entirely confined to New Holland. Only two genera have as yet been discovered belonging to it, namely, the *Ornithorhynchus* and the *Echidna*; of the latter there are two species.* It is very remarkable, that these animals have the marsupial bones, which mark a certain resemblance in structure between them and the following order.

* Sir E. Home, in Philos. Transact. for 1802. Lamarck. Zoologie Philos. tom. ii. Addenda. Cuvier, Règne Animal. Fleming, Philosophy of Natural History.

The second family, or the marsupial tribe, belongs also principally to New Holland. There is, indeed, one genus, the opossum, or didelphis, comprised in this order, which is peculiar to the warm parts of America; and some particular species of phalangers are found in the Molucca Islands; but several distinct genera, comprising upwards of 40 species, among which are the Kanguroos, the Dasyuri, or Australian Opossums; the Phascalomys, or Wombat; the Perameles; the Hypsoprymnus, or Kangaroo-rat; and some others, are distributed among the islands, and spread over the continent of Terra Australis.* These animals differ from each other in respect to their teeth, and their general form and habits: they only agree in those singular circumstances connected with their mode of reproduction.

It is a curious subject of inquiry, what physical circumstances exist in Terra Australis, which require this peculiarity of structure, or what physical influence can so have modified the organization of numerous tribes, differing from each other in other respects, as to impress them with this common character. But the plastic operations of Nature, or those physical processes, which, under the guidance of a supreme intelligence, gave their origin and peculiar structure to the different tribes of organized beings, are beyond our scrutiny.

* Geoff. St. Hilaire, Ann. du Museum, tom. iii. See also several memoirs by the same author, in different volumes of the *Annales*, and Cuvier, *Règne Animal*.

II. A distinct genus of the marsupial tribe exists in the warm parts of America: the connexion of its structure with local circumstances is here equally unknown, but it is a remarkable fact, that there are animals of a very different class, in the same country, which resemble the marsupial family in this part of the animal œconomy, namely, in producing their offspring at two separate births. I allude to the Pipa, or Surinam Toad, the peculiarity of which is well known.

Those species of marsupial animals which are found in America, and constitute the genus didelphis, differ from the Dasyuri, or Australian opossum, in various particulars; and, among others, in having long, prehensile, or muscular tails, which constitute a fifth limb, very useful to animals which are inhabitants of lofty forests.* In other respects the structure of the American opossum is more fitted for agility than that of the pouched animals of New Holland.

There are other animals in the same part of the New World which have a similar formation. The Sapajous, a numerous tribe of monkeys, inhabiting these countries, and not elsewhere existing, have a slender, spider-like form, which gives them great agility in climbing trees: they have also prehen-

* The Phalangiers of Terra Australis and the Moluccas have the prehensile tail; not so the Dasyuri, which approach the most nearly to the American opossums, or didelphies. On the differences of the American and Australian genera belonging to this family, see Geoffroy St. Hilaire, *ubi supra*.

sile tails, like those of the didelphis.* The same countries contain also the Myrmecophagæ, or American Ant-eaters, the Kinkajou, and Hystrix Prehensilis; all of which are, in this respect, similar to the opossum.

We have here an instance of evident adaptation in the structure of animals to the nature of the districts in which they are destined to dwell. The monkeys of Africa and of India have no such peculiarity, which the countries they inhabit do not require. But in the vast and lofty forests of Guiana, this particular form is of the greatest advantage to the animals possessed of it: since it enables them to climb the high trees, which would otherwise shut them out perpetually from the light of day.

It is highly probable that there is some respect, though unknown to us at present, in which the structure of the marsupial and monotrematous tribes is equally adapted to the local circumstances of the countries which they are destined to inhabit.

It has been remarked, that there are some general characteristics which distinguish the animals of the New World from those of the eastern continents.

The Count de Buffon observed, that the largest quadrupeds are confined to the Old World, and

* Tableau des Quadrumanes, par M. Geoffroy St. Hilaire. Ann. du Museum, tom. xix.

are unknown in America. Such are the elephants, rhinoceroses, hippopotami, the camelopardalis, the camel; the horse genus, and most of the ox kind. In America, the fossil remains of some large animals have been discovered, of singular structure and proportions; but of the species that now exist there are very few of considerable bulk in that continent.

It has been observed, that those tribes of quadrupeds which have the most powerful and perfect structure belong chiefly to the Old World. Those of the New have, in general, a character of organization which places them lower in the scale of animated beings.

Those carnivorous animals, for example, which have the greatest vigour and courage, are confined to Asia and Africa. The lions, tigers, hyænas, the fiercest of the cat and dog kinds, all such animals as are taken for symbols of energy, strength, and ferocity, are among them. The American tribes, which approach the most nearly to the kinds above-mentioned, are in general much more gentle and more feeble than the African and Asiatic species. The swiftest and most agile quadrupeds, as well as the most graceful and beautiful, chiefly belong to the old continent; and those, likewise, which are the most useful to man. Among these are most of the Antelopes,* including upwards of

* The mountainous parts of America contain some animals allied to the Argali, or wild sheep. Three species have also been described which are nearly related to the antelopes, but which

thirty species, the Goat kind, Horses, Oxen, and Asses.

On the other hand, we find in the New World most of those singular races, in the formation of which Nature seems to have deviated most from her ordinary rules. Such are those tribes which Linnæus referred to his order of Bruta: they are termed by Cuvier, Edentes, or quadrupeds defective with respect to teeth, some of them being entirely destitute of the organs of mastication, and all being deficient in this particular.

America contains, for example, the whole family of Tardigrades or Sloths, which Buffon characterises as defective monsters, as rude and imperfect attempts of Nature. Cuvier has remarked of the living species of this tribe, "that we find in them so little relation to ordinary animals; the general laws of organization prevailing among the species at present existing apply so little to them, the different parts of their bodies appear to be so much in contradiction to the laws of coexistence which we find established through almost the whole animal kingdom, that we might really suspect them to be the remains of another order of things, the living relics of that pre-existing nature, the ruins of which are elsewhere discovered only in the interior of the earth, and we might conjecture that these creatures have escaped by some

are supposed to form a separate natural family, requiring a distinct classification from the antelopes of the Old Continent. See Transactions of the Linnæan Society, vol. xiii. p. 40.

miracle, the catastrophes which have destroyed the other species that were their contemporaries."*

Besides the living species of Sloth, two gigantic creatures of the same singular family are known to us by their organic remains: one of these is supposed to have been of the size of an Ox; the other as large as a Rhinoceros. They have been termed *Megalonix* and *Megatherium*. Their relics have been found only in America.

The fossil animals above mentioned, resembled in some peculiarities of structure the *Myrmecophagæ*, a tribe which also recedes from the common characters of quadrupeds in several respects; but particularly in being entirely destitute of teeth. We have already noticed, that these animals are peculiar to the New World. The same observation may be applied to the Armadilloes, of which there are numerous species. These belong to the order of Bruta; they have grinding teeth, but no tusks or cutting teeth.

III. The southern region of Africa, where that continent extends into the temperate zone, may be looked upon as another insulated tract of the earth, being cut off by the intervening equator and torrid zone, from the countries of milder climate to the northward. Accordingly we find the animal creation assuming in these countries a character almost

* Buffon's Hist. Naturelle, Article des Tardigrades.—Cuvier, Mém. sur le *Mégalonix*. Annales du Museum, tom. v.—Item, Mém. sur le *Mégatherium*, par le même.—Ibid.

as peculiar as that which is displayed by the vegetation of the same region. In the inferior departments of animated nature this peculiarity is apparent. A prodigious number of insects are found near the Cape of Good Hope, which are unknown in other countries. Lichtenstein collected there between six and seven hundred species, of which, Professor Illiger found that 340 were entirely new.* In Mammalia, southern Africa contains several peculiar genera, which are spread over various distances towards the north, according to their capability of enduring the heat of tropical countries. In many instances this region contains the same genera which are found in temperate climates to the northward of the line; but then the southern are different from the northern species. Thus we find the Quagga, the Zebra, and some other species of the Horse kind, corresponding with the Ass and the Jiggetai of Asia. The South of Africa is spread out into fine level plains from the Tropic to the Cape. In this region, says Pennant, Africa opens at once a vast treasure of hoofed quadrupeds. Besides the Horse genus, of which five species have been found, there are also peculiar species of Rhinoceros, of the Hog and the Hyrax among pachydermatous races, and among ruminating animals, the Giraffe, the Cape Buffalo, and a variety of remarkable Antelopes, as the Spring-

* Lichtenstein's Travels in Africa, vol. i.

bock, the Oryx, the Gnou, the Leucophœ, the Pygarga, and several others.*

IV. We have before noticed, that the Indian Archipelago represents some peculiar phænomena in its animal productions, and that the character of these recedes in some respects from that of the animals of the Indian continent, and approximates to the African. This appears to be the case in respect to some of the larger quadrupeds. It seems, that the Sunda Isles contain a Hippopotamus, which is wanting in the rivers of Asia. The Sumatran and Javan Hippopotamus has not been so minutely described, as to enable any naturalist to ascertain its specific relations, or to distinguish it from, or identify it with the African species.† The Rhinoceros of Sumatra resembles the African more than the Indian species : it is, however, specifically distinguished from both.‡ The Crocodile tribe affords a similar instance. The whole family of Crocodiles is divided into three genera, or subgenera ; the proper Crocodiles, the Alligators or Caymans, and the Gavials. Of these, the Alligators are American animals ; the Gavials inhabit the Ganges, and probably other rivers in India.§ Of the pro-

* Cuvier, Règne Animal—Gmelin, Systema Naturæ—Pennant's Hist. of Quadrupeds—Dr. Shaw's Zoology.

† On the existence of a Hippopotamus in Sumatra, see Mr. Marsden's Hist. of Sumatra.

‡ Cuvier, Mém. sur les Rhinoceros fossiles. Ann. du Museum, tom. vii.

§ Tableau Méthodique du genre de Crocodiles et de ses espèces, par M. Cuvier, Ann. du Mus. tom. x.

per Crocodiles there are several species : some of these are African ; others belong to the isles of the Indian Ocean, but none are known to exist in continental India : one species only is said to have been found in the Antilles. It is remarkable, that nearly all the flying quadrupeds except bats, are natives of the islands in the Indian Ocean. In the order Primates, the flying Macauco or Lemur, of which Cuvier has made a separate genus, under the name of *Galeopithecus*, is seen only here. Two species of flying Squirrel, the *Petaurista* and *Sagitta*, are found in the same archipelago. In the family of bats there are two genera, which are frugivorous, have fleshy edible bodies, resembling some other quadrupeds rather than the rest of the bat tribe, except in that peculiarity of structure which enables them to fly : these have for their abode the same countries. Lastly, in the Marsupial tribe, some of the flying Phalangers are supposed to belong to the Moluccas, though several species of this family are known to exist in New Holland.

These are some of the most remarkable features in the zoology of the principal regions before mentioned. Before taking leave of the subject of the distribution of animals, I shall survey, in a summary manner, the mode in which the most numerous families of quadrupeds are distributed to different parts of the world, with reference particularly to the migrations of individual species.

SECTION VI.

Division of the principal Families between these different Regions.

MOST of those animals which are comprised by Linnæus among the Primates (an order, with one exception, corresponding with the Quadrumanous family of Cuvier) are natives of warm or temperate climates. Each of the great divisions of this order, namely, the Bat and the Monkey tribes, includes a great number, not only of species, but of genera, or sub-genera. The Monkey tribe has been divided by Cuvier into two chief branches, differing essentially from each other: these are the Simiæ proper, confined to the Old Continent, and the Sapajous, peculiar to America. The Simiæ are very local in their habitations; those belonging to Africa and to India are peculiar to each country respectively, and generally to a tract of no great extent. In the island of Madagascar, there are no true Simiæ, and their place is supplied by the Makis, a tribe of Lemurs.*

The Bat tribe is likewise subdivided into several smaller families, which may be termed distinct genera: these are distributed severally to different

* On the distribution of the Monkey and Lemur tribes, see Cuvier, Règne Animal. Mémoire sur les Atèles; par. G. St. Hilaire, Ann. du Mus. tom. vii. item tom. xiii. Tableau des Quadrumanes, par le même. Ann. du Mus. tom. xix. Magazin Encyclopédique, tom. vii. Mémoire sur les Espèces du genre Loris, par le même, Annales du Mus. tom. xiv.

regions. The Rousettes, or frugivorous bats, inhabit, as it has been already mentioned, the islands of the Indian Archipelago and the Austral countries. The Phyllostomata, Vampyres, or blood sucking Bats, of which nine species have been described, are all peculiar to the hot parts of America. The most numerous genus of Bats are the Vespertilionès, of which eighteen species have been distinguished by M. Geoffroi St. Hilaire. Some of these are very extensively dispersed; but the greater part are found only in some limited tract, either in America or the Old World; not one species being common to both continents.*

The Feræ, or the carnivorous quadrupeds, properly so termed, are more extensively spread than most other animals; but a hot climate being necessary to the existence of most of them, few species are common to two countries so situated that there is no way from one to the other, without passing beyond the limits of the torrid zone.

Of the Cat kind there are 27 or 28 species, according to the most accurate enumeration of them

* See "Description des Rousettes et des Cephalotes, deux nouveaux genres de la famille des Chauve-souris. Par M. Geoffroi St. Hilaire. Annales du Mus. d'Hist. Nat. tom. xiv. Mémoire sur les Phyllostomes et les Mégadèrmes. Par le même. Ibid. tom. xv. Mém. sur les genre et les espèces du Vespertilion, l'un des genres de la famille de Chauve-souris. Par le même. Ibid. tom. viii. Item, sur les Rhinolophes, tom. xv. p. 162. Mémoire sur quelques Chauve-souris d'Amérique formant une petite famille sous le nom Molossus. Par le même. Ibid. tom. vi.

that has hitherto been made.* Of these it appears that not one species is common to America and the Eastern Continent; even the Lynx of Canada is now believed to be a distinct kind from the European. The African species are generally confined to Africa, and the Indian to the eastern side of the Indus. But the Lion and the Leopard endure a more temperate clime, and they are found, accordingly, not only in Africa and in India, but in the intermediate countries of Persia and Arabia. We learn from Herodotus and Aristotle that the Lion was formerly an inhabitant of Greece.

Of the Dog kind, on the other hand, several species endure an arctic climate, and are common to Europe, Asia, and America. The Lagopus, or Isatis, for example, is found at Spitzbergen, is traced through the north of Asia to Kamtschatka; thence through some of the Kurilian isles, to the shores of America, to Hudson's Bay and Greenland. The Fox, the Wolf, and the Lycaon, are also common to the arctic countries. Other species of the Dog kind require a warm or a temperate climate, and these are confined to a limited space, some in America, some in Africa, others in Asia. The *Canis Antarcticus*, or the Dog of the Falkland Islands, which was the only quadruped found there, has been supposed to be a peculiar species; others

* Mémoire sur le genre des Chats, par M. Cuvier, Annales du Mus., tom. xvi.

regard it as the *Culpæus*, a species described by Molina as inhabiting Chili.*

Some of the Otters and Weasels are animals of cold climates, and common to all northern tracts. Others, *Viverræ*, or Civets, are confined to warm countries, and to one limited abode.

The numerous families which belong to the order of Glires, or Rodentes, afford many instances of a similar kind, and seem in none to contravene the general observation, unless the Rat tribe may be thought to offer some exceptions. Several species of Rats or Mice, by following mankind, have made their way into countries otherwise inaccessible to them.†

Hoofed quadrupeds are not so widely spread as the Feræ and Glires.

The pachydermatous tribes, at present existing, are confined to warm or temperate climates. Two species of Elephant are known; the Indian and the African. An extinct species seems to have been adapted to cold climates, and its remains are found in both of the great northern continents.‡

Several species of *Rhinoceros* are known; they

* Bougainville's Voyage round the World. Pennant's History of Quadrupeds. Cuvier's Règne Animal.

† The *Mus Pilorides* is said, by Gmelin, to inhabit the Indian Isles and the Antilles. The identity of species in this instance seems to be supported by no sufficient authority.

‡ Mémoire sur les Eléphants, vivans et fossiles, par M. Cuvier, Annales du Muséum.

are confined to countries of limited extent, none being common to Asia and Africa.*

The only living representative† of these large pachydermatous animals, in America, is the Tapir; two congeners of this animal have been found in Europe, among the relics of an antediluvian world.

Pachydermatous animals seem to have been much more abundant in a former age of the world than they are at present. Besides the Mastodont of the Ohio, two genera, containing several species, have been discovered by Cuvier. If we can judge from the contents of the gypsum-beds around Paris, it would seem that, in some distant age, the chief inhabitants of a part of Europe were the different species of *Anoplotheria* and *Palæotheria*.‡

The species belonging to the Hyrax, and the Hog tribes, are peculiar to warm climates, and to limited regions. The Wild Boar wanders further towards the north than any of his congeners. He is found in various parts of Europe; but has never been seen to the northward of the Baltic. This species, therefore, cannot be looked for in America. But the warm parts of America are very congenial to this race, for the domestic hogs have

* Mém. sur les Rhinoceros fossiles, par M. Cuvier, tom. viii. Annales, tom. vii.

† Mém. sur les Tapirs, ibid. tom. iii.

‡ See a variety of memoirs on these genera, by M. Cuvier, in the Annals of the Museum, and in his great work on fossil animals.

run wild there, and have formed herds of vast numbers.

Among ruminant animals, the *Camelopardalis*, Antelopes, and Goats, are confined to the Old Continent. Some peculiar species of Sheep are found in America, and some tribes which are considered as representatives of the Camel and the Antelope, as well as others which bear the same relation to the Musk; no species of either of these kinds being common to both continents.

Some species of the Deer and Ox kinds inhabit very cold climates, and these have found their way through the arctic countries from Europe and Asia to America, or in a contrary direction. Those species which are unable to sustain inclement seasons, are confined to some local range in either continent.

A survey of the habitations of the Amphibii would furnish a number of facts of a parallel kind to those we have mentioned. Each of the principal geographical districts would be found to possess, not only peculiar species, but appropriate genera, or families.

The distribution of the Crocodile tribe has been already adverted to. Among the other genera which belong to the Saurian or Laertine Reptiles, Africa possesses the Monitors, and most of the Chamæleons, one species of the latter belonging to the Moluccas. The Iguanas and Jeckos are more numerous, and more widely dispersed; some species are natives of South America, others of

different parts of the Old Continent. The Serpents are extensively spread; but the warm climates of America claim the Rattle Snake tribe, the Cæciliæ, or Naked Serpents, as well as the subgenera termed Ophisaurus and Amphisbæna, and several species of Boa.*

In the Frog tribe, the Pipa, of which some have made a distinct genus, belongs to South America; and it has been observed by Cuvier, that some of the Testudines and Lacertæ of the same regions resemble these animals in certain particulars of structure.†

The Reptiles of New Holland are likewise of very peculiar character.

SECTION VII.

Of the Animals found in Islands.

BEFORE we conclude the subject of the dispersion of quadrupeds, it is necessary to state the most remarkable facts which relate to the kinds of animals found in islands.

* Cuvier, Règne Animal. See also a variety of memoirs on Crocodiles, &c. in the Annals of the Museum, by the same author.

† The Testudo Geometrica is set down by Gmelin as an inhabitant both of Asia and South America. I suspect that this is an instance of that inaccuracy with respect to the habitations of animals, of which so many examples have been of late detected. Several species are, in many instances, brought together under one name, which a more accurate examination has proved to be very distinct.

1. Small islands, situated at a remote distance from continents, are in general altogether destitute of land quadrupeds, except such as appear to have been conveyed to them by men. Kerguelen's Land, Juan Fernandez, the Gallapagos, and the Isles de Lobos, are examples of this fact. Among all the groupes of fertile islands in the Pacific Ocean no quadrupeds have been found, except dogs, hogs, rats, and a few bats. The Bats have been found in New Zealand, and the more westerly groupes: they may probably have made their way along the chains of islands which extend from the shores of New Guinea far into the Southern Pacific. The Hogs and the Dogs appear to have been conveyed by the natives from New Guinea. The Indian isles near New Guinea abound in oxen, buffaloes, goats, deer, hogs, dogs, cats, and rats; but none of these are said to have reached New Guinea, except the Hog and the Dog. The New Guinea Hog is of the Chinese variety, and was probably brought from some of the neighbouring isles, being the animal most in request among savages. It has run wild in New Guinea. Thence it has been conveyed to the New Hebrides, Tonga, and Society Isles, and to the Marquesas; but it is still wanting in the more easterly islands, and to the southward, in New Caledonia. Dogs may be traced from New Guinea to the New Hebrides and Fiji Isles; but they are wanting in the Tonga Isles, though found among the Society and Sandwich islanders, by some of whom they are

used for food: to the southward, they have been conveyed to New Caledonia and New Zealand. In Easter Island, the most remotely situated in this ocean, there are no domestic animals, except Fowls and Rats, which are eaten by the natives: these animals are found in most of the islands; the Fowls are probably from New Guinea. Rats are to be found even on some desert islands, whither they may have been conveyed by canoes, which have occasionally approached the shores. It is known, also, that Rats occasionally swim in large numbers to considerable distances.

Secondly, we may observe that quadrupeds found on islands situated near to continents, generally form a part of the stock of animals belonging to the adjacent main-land. This remark may be made respecting the animals of the British isles, of the Mediterranean isles, of Madagascar, and of the islands near New Holland. When any quadrupeds are found in places so situated, which do not exist in the neighbouring continents, they are generally distinct species found in no other spot, and either have always had a confined and local existence, or have been elsewhere destroyed, and protected only by an insulated situation.

From these circumstances it seems probable, that islands in general derived the quadrupeds, which are found in them, from the adjacent continents, unless these islands may in some instances have been the seats of a particular creation; but the latter supposition admits of an alternative, since it

is possible that a stock of animals which has been exterminated on a continent, may have been preserved in a contiguous island.

But here a difficult inquiry immediately suggests itself: how we are to explain the communication, thus supposed, between islands, and countries separated from them by the sea. This difficulty may be removed in many instances by referring to the changes, which we have reason to believe the present surface of the earth to have undergone in the course of ages. Tradition has in many places preserved the memory of the disruption of lands formerly united, as that of Europe and Asia, by the bursting of the Euxine through the Bosphorus, and of Sicily and Eubœa from the shores respectively adjacent to these islands.*

* *Claræ jampridem insulæ, Delos et Rhodos memoriæ produntur enatæ: Postea minores, ultra Melon Anaphe; inter Lemnum et Hellespontum, Nea; inter Lebedum et Leon, Halone; inter Cycladas Thera et Therasia, &c.*

Namque et hoc modo insulas rerum natura fecit. Avellit Siciliam Italiæ; Cyprum Syriæ; Eubœam Bœotiæ; Eubœæ Atalantem et Mærin; Besbycum Bithyniæ; Leucocosiam Sirenum promontorio.—Plinii Hist. Nat. 2.

Several traditions of this sort are mentioned by the ancient writers, and must occur to the memory of every classical reader. Ovid reports some examples of the kind.

“——— Sic toties versa es Fortuna locorum,
Vidi ego, quod fuerat quondam solidissima tellus
Esse fretum; vidi factas ex æquore terras.

* * * * *
Fluctibus ambitæ fuerant Antissa Pharosque,
Et Phœnissa Tyros, quarum nunc insula nulla est.
Leucada continuum veteres habuere coloni.
Nunc freta circueunt. Zancle quoque juncta fuisse.

Dicitur

SECTION VIII.

Concluding remarks on the Dispersion of Animals in particular.

FROM the preceding survey of the dispersion of animals, the following results offer themselves.

1. That the various tribes are not spread over the earth by chance, or without local relations, but that the different regions of the world may be said to have given origin to peculiar kinds adapted re-

Dicitur Italiæ, donec confinia pontus
Abstulit, et media tellurem reppulit unda.
Si quæras Helicen et Burin Achaidas urbes,
Invenies sub aquis, et adhuc ostendere nautæ
Inclinata solent cum mœnibus oppida mersis."

Metaph. 15. 261.

And Virgil also mentions the current tradition of the origin of the Sicilian Straight.

"Hæc loca vi quondam et vastâ convolsa ruinâ
(Tantum ævi longinqua valet mutare vetustas)
Dissiluisse ferunt, cum protenus utraque tellus
Una foret; venit medio vi pontus et undis
Hesperium Siculo latus abscidit, arvaq; et urbes
Littore diductas angusto interluit æstu.—Æn. 3. 415.

Also Valerius Flaccus alludes to it, Argonaut. 1. 590.

"cum flens Siculos Cœnotria fines
Perderet et mediis intrarent montibus undæ."

It might be supposed that these islands acquired their form before they became the seat of animate beings. A proof that this was not the case is afforded by the fact, that quadrupeds of the greatest bulk, as Elephants, have been found fossil in islands of so small extent, that such an animal could scarcely subsist in them for a single week. (Fortis. Mém. pour l'Hist. Nat. d'Italie. Cuvier. sur les Eléphants fossiles. Annales de Muséum. tom. viii.

spectively by their organization to subsist under the local circumstances, among which they appear first to have been called into being. Hence many entire genera, as well as particular species, are wholly confined to certain districts.

2. That when the same genus is discovered among the wild and native animals of two distant and entirely separated regions, of which fact there are many examples, we do not find that the same species exist in both countries, but corresponding species of the same genus. Thus the American species of the cat-kind are different from the African and Asiatic, and the species of horse, ox, antelope, elephant, and rhinoceros, found in Southern Africa, are distinct from those of Asia, where the same genera also exist.

SECTION IX.

Recapitulation with respect to the Dispersion of Organized Beings in general.

WE have now surveyed the facts relating to the distribution of organized beings, both plants and animals, over the earth, as extensively as our limits will allow. Although some departments of the animal kingdom have been hardly touched upon, and others but briefly considered, we have gone over a range of facts which entitle us to draw some general inferences. There appears to be sufficient evidence to shew that two of the three conjectures stated at the outset of this inquiry, are irreconcilable with the phænomena of nature, and

to render the third, which is the only remaining hypothesis, extremely probable.

1. The hypothesis of Linnæus, that all races of plants and animals originated in one common centre, or in one limited tract, involves difficulties, which in the present state of our knowledge amount to physical impossibilities. It is contradicted by the uniform tenour of facts, both in botany and zoology.

2. The second hypothesis, which supposes the same species to have arisen from many different origins, or to have been at the period of their first existence generally diffused over separated countries, is also irreconcilable with facts. It does not appear that Nature has every where called organized beings into existence, where the physical conditions requisite for their life and growth were to be found.

3. The inference to be collected from the facts at present known, seems to be as follows:—the various tribes of organized beings were originally placed by the Creator in certain regions, for which they are by their nature peculiarly adapted. Each species had only one beginning in a single stock; probably a single pair, as Linnæus supposed, was first called into being in some particular spot, and their progeny left to disperse themselves to as great a distance from the original centre of their existence, as the locomotive powers bestowed on each species, or its capability of bearing changes of climate, and other physical circumstances, may have enabled it to wander.

NOTES ON CHAPTER III.

Comparison of the preceding Remarks with the History of Mankind and the Deluge, contained in Genesis.

SECTION I.

Statement of an hypothesis on this subject.

BEFORE I pursue the principal train of inquiry to which the remaining chapters of this work are dedicated, it will be worth while to consider how the results which have arisen from the facts already surveyed can be reconciled with the history of an Universal Deluge, which is contained in the book of Genesis, and with the circumstances connected with that event. Many persons may at first be disposed to regard the inferences I have drawn, as contradictory to that record. It will appear, if I am not mistaken, on further examination of the subject, that there is no ground for such an opinion, and that the facts connected with the dispersion of animals, when surveyed in a certain point of view, tend rather to illustrate the history of the Deluge, and perhaps to remove some difficulties which have encumbered it.

It seems indeed difficult to maintain the opinion of Linnæus and Pennant, that all the tribes of land animals now existing descended from a stock that was preserved in Noah's Ark, because in that case they must all have been congregated in one spot; a supposition, which, as we have seen, can hardly be reconciled with the results of zoological researches. But perhaps there is no necessity of assuming any such position. It is no where asserted in the

Mosaical history; and who can prove that the various nations of animals, which have the centre of their abode, and seem to have had the origin of their existence in distant regions, as in Terra Australis, or South America, were not created since the era of that Deluge, which the human race and the species of animals that were their companions survived? This, indeed, seems to be the conclusion which facts every day discovered, dispose us more and more to adopt.

It might indeed be conjectured, that the Deluge recorded in Genesis, and of which all ancient nations had similar accounts, was perhaps not universal, in the strict sense of the word, as it is now understood. The whole earth, the *Kol Aeretz*, which is said to have been submerged, might be only all the “οἰκουμένη,” or habitable world; it might only extend to the utmost limits of the human race, and other regions, with their peculiar organized creations, might be supposed to have escaped; and this hypothesis might perhaps be maintained without doing any violence to the sacred text, of which every expression has received a divine sanction. But geological phænomena, and a variety of considerations, render it most probable that this Deluge was strictly universal.

It is known that the fossil remains of animals which have been discovered in various parts of the earth, and which appear to be relics of the antediluvian world, chiefly belonged to species different from those which now exist. These species were probably exterminated in that great catastrophe. Mankind escaped by the means which are recorded in the sacred, and in many profane histories, and with them were saved the stock of animals peculiar to the region in which before the flood they had their dwelling, and of which they, and most of the early domesticated animals, are in all probability the native inhabitants. After the Deluge, when new regions emerged from the ocean, it is probable that they were supplied with organized inhabitants, suited to the soil and climate of each district. Among

these new races, Man, and the tribes which had survived with him, and which were his companions, spread themselves in a later time.

Such is the hypothesis which I am inclined to adopt, in order to reconcile the facts collected in the preceding chapter with the Scriptural History. Some persons will object to it that it assumes positions not laid down in the sacred narrative, such as a partial creation subsequent to the Deluge. This must be granted, and the proof of such positions must be sought, not in the Scriptural History, but in external phænomena. The silence of the Scripture in respect to such facts, seems to be of little consequence. It is not to be presumed that these sacred books contain a narrative of all that it has pleased Divine Providence to effect in the physical creation, but only of his dispensations to mankind, and of the facts with which Man is concerned. And it was of no importance for men to be informed at what era New Holland began to contain kangaroos, or the woods of Paraguay ant-eaters and armadilloes.

SECTION II.

Proofs and Illustrations.

I SHALL now offer some remarks in support of the opinion I have adopted, in order to shew that it does not rest altogether upon conjecture.

I. That the whole aggregate of animals, of which we have any knowledge, including the tribes now existing, and those whose remains are found in the fossil state, were not coëval, or have not all existed at the same period, is, I suppose, a point, which few will now dispute. It seems to have been fully proved by geological researches, that repeated creations have taken place, and that the organized tribes in existence have more than once perished, to make room for a new order of beings. It seems probable, and

perhaps in some instances evident, that these epochas, or revolutions in nature, have been accompanied or preceded by inundations, and other catastrophes. Such events may have contributed to prepare the earth for supporting new tribes of organized creatures. After each of these changes in its physical condition, it has given birth to races different from those which before existed, and adapted to the circumstances of its new state. We have, therefore, from analogy, some ground for the supposition, that after the last great catastrophe which the earth has undergone, and which is the only one recorded in history, because it is the only one which has taken place since the creation of mankind, a similar renewal of the animal and vegetable kingdoms may have ensued.

II. That this was really the fact may be collected from an examination of the organic remains of the antediluvian world. It would be remote from the object of this work to enter into any details on this subject, and I shall only state a few of the general facts which are admitted by naturalists, and which tend to illustrate my position. The remains of animals found in the oldest strata, or those deposited in the earliest period, are known to display a very simple structure, and are very remote from the present forms. At successive periods, the nature of animals became more complete, or rather more complicate, and more approaching to the appearances of those at present in existence. It has been thought possible, on grounds which are satisfactory to most persons, to distinguish that class of organic remains which are the product of the last great catastrophe sustained by our planet: these are, therefore, to be looked upon as relics of the age before the Flood: and hence, some knowledge has been obtained of the character of the animal world during the antediluvian period. It appears, then, that although there were in being at that time many creatures belonging to genera which now exist, yet there

were comparatively very few animals of the present species: some of the domesticated races being excepted from this remark.* In general, however, it seems, that Pachydermes abounded before the Flood, and that Carnivora belong chiefly to the subsequent creation: as the poets fabled, that ferocity and mutual destruction belonged to the later iron age. There were then elephants, tapirs, and ruminants of various descriptions, but of different species from those which are most nearly allied to them in the present world.

When all these facts are duly considered, it will not be looked upon as a groundless conjecture, if we conclude that the animal creation was in a great part renewed after the last great cataclysm which the earth has undergone, as it appears to have been at previous and successive periods. When the different regions of the globe emerged from the waters of the Deluge, whether they emerged at once, or as Linnaeus and some other naturalists have imagined, gradually, and by a slow subsidence of the ocean,† it is probable

* The stock of the domesticated oxen, for example, has been found in a fossil state.

† Linnaeus has maintained this supposition with great ingenuity in his treatise, "*De Telluris Habitabilis Incremento*." Proofs may be collected from history, and from physical phenomena, that many parts of the world are more extensive now than they were formerly, and that the habitable surface has in various regions increased. The sea, within the reach of tradition, washed the mountains of the Thebaid. Recently proofs of its existence have been found in the North of Africa, extending perhaps over the whole Zahara. (See Lyon's Travels.) In India ancient historical documents refer to the period when the ocean covered all the country below the Ghauts. (Voy. de M. Le Gentil.) In Terra Australis, Vancouver and Flinders, and in Timor, Péron, have been struck with facts leading to a similar inference. (Péron, tom. ii. p. 180.) It may be added, that nearly all the islands of the tropical zone are either the products of

that the organized productions of each country, which in fact seem peculiar, and adapted to the circumstances of every soil and climate, were called into existence. Mankind had, before the Flood, inhabited the central region of Asia, and their earliest dwelling subsequently to this event was in the same region. In this all histories, sacred and profane, agree. The same country seems, indeed, to have been the native seat of most of the tribes of animals which were domesticated by Man in the earliest times; and which have accompanied him in his late wanderings over the earth. There at least many of them are still found in the wild state, as well as the cereal gramina, which have been, perhaps, the most universal food. The central tract of Asia, as it has often been observed, must have been, from its greater elevation, first raised above the ocean.* There volcanic agency, or consist of coral beds: the latter, in many places, form only reefs: in others, being more elevated, they become the basis of whole archipelagos, as of the Philippines, Society Isles, and many other groupes.

* It was in this region that Buffon and Bailli, the former founding his doctrine upon a fanciful theory of the world, the latter on the indications of ancient astronomy, and the earliest traces of the history of human society, placed the cradle of our race. (See Buffon's *Epoques de la Nature*, and Bailli's *Lettres à M. de Voltaire*.) It is amusing to observe that the same speculations which lately amused the philosophers of Europe, from the fertile brains of these two Frenchmen, were long ago anticipated. Whether the following passage in Justin suggested to either of these writers the hypothesis which became so celebrated, I shall not pretend to determine: "*Si ignis,*" says Justin, "*prima possessio rerum fuit, qui paullatim extinctus sedem terris dedit; nullam prius quam septentrionalem partem, hyemis rigore ab igne secretam: adeo ut nunc quoque nulla magis rigeat frigoribus.*"—"Quod si omnes quondam terræ submersæ profundo fuerunt; profectò editissimam quamque partem decurrenti-

mankind, and the animals which were natives of the same region, were preserved from the otherwise universal catastrophe, and these are the tribes which have replenished the earth in its most distant parts, and have even supplanted, in many remote countries, the native and peculiar stock.

SECTION III.

Bearing of this Inference on the following Discussion.

THE preceding remarks are intended to show, that the conclusions drawn from the facts connected with the dispersion of animals and plants, are not at variance with that *bus aquis primùm detectam; humillimo autem solo eandem aquam diutissimè immoratam; et quantò prior quæque pars terrarum siccata sit, tantò priùs animalia generari cœpisse. Porro Scythiam adeo editiorem omnibus terris esse, ut cuncta flumina ibi nata in Mæotim, tum exinde in Ponticum et Ægyptium mare decurrant. Lib. ii. cap. 1.* From all this it appears that there were some in the time of Justin, who supposed the northern tract of Asia to have been the region of the world first inhabited, and that they maintained this hypothesis by two arguments, which happen to have been favourite speculations with some persons in more recent times. In the first place they contended, that if the element of fire once held the whole globe, as it was conjectured, in a state of intense heat, and different countries became habitable in proportion as the heat abated, the more northern region, where cold is now most severe, would be the first that would become sufficiently temperate for the existence of organized beings. Secondly, it was argued, that if all the countries now inhabited, were once beneath the surface of the ocean, the most elevated regions would first emerge from the subsiding waters, which would continue for a longer time to cover the lower levels, and the more early each country became dry and uncovered by the sea, the more early would it be fitted for the abode of men and animals. Now Scythia was more elevated than other parts of the world, since rivers there took their rise which discharged themselves into remote seas, as into the Mæotis, the Pontic, and Mediterranean.

history of mankind and of the world, contained in the book of Genesis, and forming a part of the Sacred Scripture. I shall terminate these comments with a suggestion referring to the inquiries which are to be pursued through the remainder of this work.

The race of men to which we belong is of the antediluvian world, a relic, as well as the domestic animals which surround us, of that creation which preceded the last deluge. But are all the tribes of men, including the natives of remote regions, the African, American, and Australian races, descended from the arkite stock?—Or are we to conclude, that new tribes of men were created in each insulated spot, together with the inferior species of animals which there began to exist? Has New Holland, for example, an indigenous stock of human inhabitants, as it has of other animals and of plants?

I am not going to maintain that either of these suppositions is equally accordant with the Scriptural history. Perhaps it would be difficult to reconcile the latter with the tenour of this history; but this is not a reason for waving the discussion; but rather for entering with greater care and patience into a consideration of the facts which bear upon it.

It must now be observed, that we have already reduced the discussion of this subject within narrower bounds than when we entered upon the inquiry comprised in the foregoing chapters. It has been concluded, that each particular species of animals had only one origin, or was created only in one spot. We have to apply this position hereafter to the human kind. In the mean time we must inquire whether the genus of Man contains one or more species. If it should appear that there are any specific differences between the several races, we must admit that several distinct families of men have been created, probably in different regions, and at different times. But, if all the tribes of

men are of the same species, they must be inferred to be of one race or lineage; they all sprang from the family created on the banks of the Euphrates, which was preserved in an ark, and survived upon the mountains of Armenia.

After all that has been said in this Note, I must remind my readers, that I merely offer an hypothesis, which I submit to the judgment of every one to receive or reject. The conclusions drawn in the preceding chapters do not agree, *primâ facie*, with the ideas generally entertained respecting the extent and consequences of the Noachic Deluge. But it may be observed, that there is more than one construction of the history of this event, which will remove any discordance that may appear to exist between this part of the sacred record and the inferences resulting from facts. Some of these have been suggested; and I have pointed out the supposition which to me appears, on the whole, the preferable one; but if my readers are of opinion that there is any other attended with fewer difficulties, I shall not contend with them, and shall gladly adopt any hypothesis by which the phænomena of Nature shall be explained in a manner most accordant with Truth and with the Sacred Writings.

BOOK II.

ATTEMPT TO ELUCIDATE THE INQUIRY WHETHER
ALL THE RACES OF MEN BELONG TO ONE SPECIES.

CHAPTER I.

Analytical Statement of the different Methods of determining the Limits of Species, and of elucidating the proposed Inquiry.

SECTION I.

Meaning of the terms, Species—Genus. Specific Difference.

THE meaning attached to the term species, in natural history, is very simple and obvious. It includes only one circumstance, namely, an original distinctness and constant transmission of any character. A race of animals, or plants, marked by any peculiarities of structure, which have always been constant and undeviating, constitutes a species; and two races are considered as specifically different, if they are distinguished from each other by some peculiarities, which one cannot be supposed to have acquired, or the other to have lost, through any known operation of physical causes; for we are hence led to conclude, that the tribes

thus distinguished cannot have sprung from the same original stock. This definition is not arbitrarily assumed, but simply expresses a distinction established by nature. The same meaning was originally attached to the term genus, which we now apply to species. Several species so resemble each other as naturally to suggest an idea of some near relation between them. The horse and the ass, to which may be added other animals belonging to the horse kind, afford an instance of this remark. The several species of elephants are another; and a third is furnished by the different races of oxen, buffaloes, uri or auroxen, bisons, all belonging to the ox genus, and bearing a striking resemblance to each other. In some instances of this description, the forms of several animals seem to be so modelled upon a particular type, that they have all been imagined to have arisen from the same race, and hence the term genus has been applied to the whole stock collectively. We are unacquainted with any physical causes, the operation of which is capable of producing those differences of structure which distinguish the several species of one genus from each other. There must, indeed, be some principle on which the phenomena of resemblance, as well as those of diversity, may be explained; and the reference of several forms to a common type, seems calculated to suggest the idea of some original affinity; but, as this is merely a conjecture, it must be kept out of sight when our inquiries

respect matters of fact only. At present a *genus* is to be considered as an assortment of several species on a principle of resemblance, and it may, therefore, include more or fewer species, according to the particular views of the naturalist; and the term *species* must be solely applied to those collections of individuals which so resemble each other that, by referring merely to the known and well ascertained operation of physical causes, all the differences between them may be accounted for, so as to present no obstacle to our regarding them as the offspring of one stock, or, which is the same thing, of races precisely resembling each other.

But, though the idea of species is simple and definite, it is not always easy to determine what races of animals are of one, and what of distinct species. It is well known that considerable varieties arise within the limits of one species, and such varieties are often transmitted to the progeny, and become, in a great measure, permanent in the race. It is hence difficult, in some cases, to ascertain whether two races of animals, of the same genus, and similar in many particulars, but different in others, are merely what is termed varieties of one species, their diversities having arisen from the agency of external causes on a stock originally uniform, or tribes entirely distinct from their origin. We cannot find a solution of this problem by referring directly to any particular criterion or principle of distinction; but, in order to arrive in any indivi-

dual case at a satisfactory conclusion, we are obliged to enter into a variety of considerations, and survey the subject in different points of view, from each of which we may derive probable arguments.

In the following sections I shall make some remarks on the different methods by which this subject may be investigated.

SECTION II.

First method of determining on the Identity or Diversity of Species; viz. by reference to the principal Laws of the Animal Economy.

A MAIN part of this inquiry should be founded on a comparison of the principal circumstances relating to the animal economy, or the physiological character of the tribes to be considered. The most permanent and invariable characters in species do not perhaps consist in the organization of particular parts, so much as in the general arrangements, or laws, of the animal economy in each tribe of animals. If we find, on inquiry, that the physiological characters and habits are similar in any particular races; if they agree, for example, as to the duration of life; in all the circumstances connected with their breeding, as in the times and frequency of breeding, the period of utero-gestation, the number of their progeny; if the other natural functions observe the same laws; if they are subject to the same diseases, susceptible of the same contagions; if their animal faculties, instincts, and

habits, are found precisely to resemble each other; there will be a very strong presumption that they are of the same species. This presumption is founded on the fact, that few important diversities in respect to any of these principal laws of the animal economy are known to take place within the limits of one and the same species; while, on the other hand, those tribes which most strongly resemble each other, but are yet specifically distinct, are found, in reality, to differ in the particulars above-mentioned. This remark will be illustrated in the following pages; at present I shall give one example of its application. The Wolf, and the domestic Dog, are tribes very nearly allied; by some they are supposed to be of the same species. But, if it is true, as some facts related by naturalists seem to indicate, that the period of utero-gestation in the Wolf is considerably longer than it is in the Dog tribe,* this circumstance seems to point out so great a physiological difference, as to prove that the animals in question are specifically distinct. We are acquainted with no similar deviation in the animal economy of any species, and it is on

* The Count de Buffon asserts, that the time of utero-gestation in the Wolf is above one hundred days, while that of a bitch is known to be about sixty-two or sixty-three. An instance is reported, in the fourth volume of the Annals of the Museum of Natural History, in which the time of gestation in the Wolf seemed to be eighty-nine or ninety-one days. I do not know that there are any facts accurately observed which determine the point. Yet this might easily be done. Mr. Hunter has some observations which do not seem to agree with the accounts above cited.

the whole very unlikely that such a fact will ever be observed.

SECTION III.

Second Criterion—Reference to the propagation of Animals of mixed Breed.

A CRITERION, by which the unity or distinctness of species may be determined, has been sought by many naturalists, in the capability of propagating, or the sterility of the animal which is the progeny of two races. The mule is well known to be, in general, incapable of procreating, though to this remark exceptions have occasionally happened. It has been somewhat hastily inferred that all other hybrid animals, a term applied to the offspring of a male and female of different species, are equally barren; and from this circumstance naturalists have attempted to determine what races of animals are specifically distinct, and what are only varieties of the same species. It is presumed that, if the offspring is prolific, the parent animals may be concluded to be of the same species; if it be sterile, an inference is drawn that the races from which it is descended are originally separate, or of distinct kinds.

The objection which occurs to this attempt is, that the observation is founded on a very scanty and incomplete number of facts. The requisite experiments have been made only in a few instances, and in these it would appear, that as many facts occur which are in opposition to the principle

assumed, as those which coincide with it. According to Buffon, and other naturalists, the hybrid animal generated between the Sheep and the Goat is prolific, and its offspring continues to propagate the race without any impediment. The offspring of the Wolf and Dog has been proved to be prolific; and, notwithstanding the opinion of some naturalists, who consider these animals as of one species, I cannot help suspecting that this is an instance of the propagation of a true hybrid. The Wolf and the Dog differ, not only with respect to their habits and instincts, which, in the brute creation are very uniform within the limits of one species; but some differences have also been pointed out in their internal organization, particularly in the structure of a part of the intestinal canal: * in this particular it seems that the Dog and the Jackal agree, while both differ from the Wolf. This circumstance seems to prove these animals to be specifically distinct; and, if the period of uterogestation is in reality different in the two races, as I have hinted in the foregoing section, the conclusion appears to be placed beyond all doubt. Other examples of a similar tendency may be adduced; but it is doubtful with respect to some instances, which are related, whether the parent races are really distinct species. The Bactrian Camel, and the Arabian Camel, or Dromedary, breed toge-

* Professor Gldenstdt, of Petersburg, has discovered some difference in the *intestinum ccum* of the Wolf and the Dog.

ther, and their progeny is said to be prolific. The Bison of India and America are said to breed without difficulty with the cattle of Europe, and the humps which distinguish the former, gradually disappear in the mixed race.*

These instances are quite sufficient to shake our confidence in the doctrine of Buffon and Hunter, if not entirely to disprove it, and establish the opposite opinion.

But we must not yet entirely take leave of this subject. It is manifest that there is some principle in nature which prevents the intermixture of species, and maintains the order and variety of the animal creation: if different species mixed their breed, and hybrid races were often propagated, the animal world would soon present a scene of confusion; its tribes would be everywhere blended together, and we should, perhaps, find more hybrid creatures than genuine and uncorrupted races. By what method is this confusion prevented, if not by the law which has been supposed to have been established for this desirable end? The fact seems to be, that the tribes of wild animals are preserved distinct, not by the sterility of mules, but by the circumstance that such animals are never in the state of nature brought into existence. The preservation of distinct species is sufficiently provided for by the natural repugnance between individuals of different kinds. This is, indeed, overcome in

* De la Nux apud Zimmerman. Zoolog. Geograph.

the state of domestication, in which the natural propensities of animals cease, in a great measure, to direct their actions; but, while they remain in the wild and unrestrained condition, it is obviously sufficient to prevent any blending of species, since under these circumstances no mule animals are ever, as far as we know, produced at all.

If this be a true statement of the fact, we may hence deduce a criterion of specific distinctness which is likely to be better founded than the method before considered. Animals which, in their natural state, are not kept asunder by any instinctive repugnance; but, on the contrary, frequently and habitually propagate together, are to be considered as of one species.*


If this criterion is not in itself to be entirely relied upon, the evidence it affords is at any rate of some value, and to be taken into the account with other considerations. We shall in this view make the application to the particular instance we are chiefly concerned with, after we have discussed the other subjects which belong to this place.

* This view of the subject seems to have occurred long ago to Frisch, who says, "Wenn sich Thiere von Natur mit einander gatten, so ist solches ein unfehlbares kennzeichen, dass sie von einerley specie sind." Frisch, cited by Blumenbach, *De Gen. Hum. Var. Nat.*

SECTION IV.

Third method of inquiry—Criterion founded on analogy to known Variations.

THERE is another way of examining this subject which the statement of the question itself naturally suggests. The inquiry, whether the peculiarities of structure, colour, or other external qualities, which distinguish any particular races of animals from each other, are varieties which have sprung up in the stock of one species, or original diversities, implies a previous observation of the fact, that the several kinds of animals are liable to vary more or less in such particulars from the common, or primitive character. Hence we are led to direct our attention to this circumstance, which forms the ground of the inquiry, and a further elucidation of which presents the most natural way of solving it. For, if we can only discover what those variations are to which species are subject, it will be easy to determine whether the particular diversities we have to account for are analogous to them, and, therefore, resolvable into the same class of natural phenomena. Thus to advert to the particular subject which is about to come under our consideration, we may remark that certain varieties in form and colour are seen in most of the tribes of animals with which we are acquainted, as in horses, oxen, pigs, poultry; and that these varieties exist under circumstances which preclude the idea of



difference in species. It will remain to be inquired whether the diversities in mankind are of a similar description. If there should be found to be a strict analogy between those varieties in form, colour, and the organization of parts, which exist in different races of men, and the diversities which occur in the lower departments of the animal creation within the limits of the same species, the comparison of these two classes of phænomena would lead us to an obvious conclusion respecting the former.

This method of inquiry was first applied to the subject of the varieties in mankind, by Professor Blumenbach, who has made it the groundwork of an extensive and highly valuable treatise, as well as of some shorter essays, which have a reference to the same topics.*

SECTION V.

Fourth method of inquiry—Facts to be collected directly bearing on the subject.

THE method explained in the last section, of considering the phænomena, and drawing an inference respecting their nature and causes from analogy, has many advantages in the facility of its application to cases which cannot be brought to any other issue. But inferences from analogy are never so fully conclusive as facts directly bearing

* See Blumenbach de Generis Humani Varietate Nativa. Gottingen. Also Beyträge zur Naturgeschichte. 2 theilen. Gotting. 1790 und 1806.

upon the particular point to be determined. In the instance to which we are about to direct our attention it may be thought that the chain of evidence is incomplete, unless we can find examples of variation actually displaying itself in the human kind. It may be suspected that the diversities of mankind present an exception to the general conclusion resulting from the comparison of other races. Though apparently analogous, these phenomena may depend on different causes. The former may be the permanent and uniform characters of a whole race, or stock; while the latter are the casual effect of external agents. These remarks would have a considerable weight, if we could not discern that such varieties have actually displayed themselves in any of the races of mankind. We must, therefore, direct our attention to the external characters which distinguish one tribe of men from another, and observe how far they are permanent, and how far subject to change; and, in general, to the facts which show how far the races of men are subject to variation. That variety of complexion which belongs to albinos, is well known to spring up occasionally in families of a different colour. Now, if we could in like manner trace the origin of all other diversities in the human form and colour, the point at issue would be fully determined.

In following this suggestion, we shall examine the history of the various races of mankind, and endeavour to find out how far their peculiarities are liable to change; whether nations descended

from one stock have always retained their peculiar character, and the form they derived from their common ancestors, or in what degree, and under what circumstances, they have deviated from it.

We may here make a remark, that it does not appear to be very important in respect to the general conclusion to be drawn, whether the deviations we observe are found to display themselves at once in strongly marked examples, or take place by slow and imperceptible degrees. The variations of colour afford the best explanation of this remark. If it could be shown that a white family has arisen from a black stock, or a black family from a white stock, it is obvious that the difference of complexions would no longer be regarded by any body as a specific distinction. But the same conclusion may be drawn, if we can point out facts which prove that the transition has taken place by several degrees; if, for example, we find one instance in which a brown, or copper-coloured progeny has sprung from a black race, and then discover another instance where this last colour is the prevalent hue, and show that it has again undergone variation, and that a white offspring has arisen from it; it will thus be rendered evident that there is no clearly marked and definite line which the tendency to variety or deviation cannot pass; and we may rest satisfied that there is in this case no specific distinction.

It may almost be regarded, as a corollary to this remark, that those characters which are not wholly

peculiar to any tribe are not specific distinctions, or, in fact, diversities which present any difficulty with respect to a general conclusion. It is well known, for example, that many Negroes have the tibia more crooked than the majority of Europeans, yet this is not a circumstance which argues their specific diversity, because there are not a few Europeans, and even whole families, who have the same conformation nearly in as great a degree. Characters which are ever so striking when we regard nations, but which do not hold in respect to individuals, are not to be looked upon as distinguishing a species.

We shall now proceed to apply each of the foregoing considerations to the subject, on account of which we have proposed them to the reader. The two first topics will be discussed in a short compass; they will be concluded in the following chapter. The two latter will require a more ample investigation: the remaining chapters in this book will be allotted to the third: the fourth method of inquiry, to which we have alluded in the present section, must be considered in detail in the subsequent parts of this work.

CHAPTER II.

Application of the two former methods of inquiry to the different races of Men.

SECTION I.

Application of the first method. Physiological comparison of the different races of Men—With respect to the general laws of the animal economy—with respect to Diseases.

I BELIEVE we may safely venture on the assertion, that there are no peculiarities, in respect to the laws of the animal economy which distinguish one race of men from the rest of their kind, of such a description as to render it probable that they constitute a distinct species. In order to make this evident, I shall collect some comparative observations on the physiological history of the most dissimilar races.

I. Some writers have supposed that there is a difference between Europeans and some other nations in respect to the duration of life, and the periodical phænomena of the constitution, and that in some of these particulars, the Negro race especially is distinguished from white men, and approaches to apes, and other brute animals.

In the duration of life, I find no reason to believe that there is, in reality, any remarkable difference between the different races.

It must, indeed, be allowed, that savage nations

are generally of shorter life than civilized ones. Dr. Winterbottom* informs us "that few of the inhabitants of Guinea arrive at old age. They turn old much sooner than Europeans, and appear in a state of decrepitude when the latter have scarcely reached their grand climacteric." Mr. Adanson makes the same remark: "the Negroes of Senegal," he observes, "are really old at the age of forty-five, and sometimes sooner."

But this shortness of life is rather to be ascribed to some circumstances of the savage state, than to a peculiarity of any race of men; it is sufficiently accounted for by the intemperate habits to which savages are addicted, and the perpetual hardships to which they are exposed. The term of life seems to be as long among Negroes, when placed under different circumstances, as in any other race of men. I have looked over some registers of births, deaths, and ages of Negroes, on some large estates in the West Indies, and have observed that the instances of longevity were numerous. The age of seventy, and from that to eighty, appears to be by no means infrequent. Mr. Edwards, the historian of the West Indies, bears testimony to the fact, that Negroes, in these islands, often attain to a great age: he mentions one instance of a Negress, 120 years old, and a second of one aged, at least ninety-five, who was strong and healthy.† Even among the

* Dr. Winterbottom's Account of the Native Africans of Sierra Leone, vol. ii.

† Edwards's History of the West Indies.

native Africans, instances of longevity occur, sufficient to prove that Negroes are capable of as long life as Europeans. Dr. Winterbottom mentions "a man living near the Sherbro, who remembered to have been in the island of Barbadoes when fifteen years of age;" this occurred during the reign of Queen Anne, or, as he expressed it, "when the King of England was a woman," consequently he must have been, in 1796, nearly a hundred years of age.* Paterson mentions a Caffrarian, aged ninety, and Mr. Barrow saw Hottentots more than 100 years old.†

Dr. Rush, of Philadelphia, informs us that the Indians of North America have, at a more early period than Europeans, the marks of old age, and that longevity is more rare among them than among white people." I do not doubt Dr. Rush's testimony, but I suppose the facts he asserts must be attributed to accidental circumstances, and chiefly to the intemperance of those savage tribes who have intercourse with white people, and procure from them intoxicating liquors, for I find that many writers give a very different account respecting the frequency of longevity, and the phenomena of old age, among the native Americans.

Azzara relates some remarkable facts to this purpose, in his Travels in South America. In describing the Charruas of Paraguay, he says that

* Paterson's Journey in Caffraria.

† Barrow's Travels in the Interior of Africa.

they never lose their hair, which only becomes grey by half in persons aged about eighty years.

The Mexicans, says Clavigero, become grey-headed and bald earlier than the Spaniards; and although most of them die of acute diseases, it is not very uncommon among them to attain to the age of an hundred years.*

"Among those Americans," says the same writer, "whose great fatigues and excessive toil do not anticipate their death, there are not a few who reach to the age of eighty, ninety, and one hundred years; and, what is more, without there being observed in them that decay which time commonly produces in the hair, in the teeth, in the skin, and in the muscles of the human body."†

We have a similar observation from Von Humboldt respecting the native Americans. He says, "It is by no means uncommon to see at Mexico, in the temperate zone, half-way up the Cordillera; natives, and especially women, reach a hundred years of age. This old age is generally comfortable; for the Mexican and Peruvian Indians preserve their strength to the last. While I was at Lima, the Indian, Hilario Pari, died at the village of Chiguata, four leagues distant from the town of Arequipa, at the age of 143. He remained united in marriage for ninety years, to an Indian of the name of Andrea Alea Zar, who attained the age of 117. This old Peruvian went, at the age of 130, from three to four leagues daily, on foot.‡

* Mexican History, book i.

† Idem. Dissertations.

‡ Political Essay on New Spain.

Another race of men, very different from the above-mentioned, and also from the generality of Europeans, are the Laplanders. According to Rheen, who is cited by Sheffer,* the Laplanders are rather remarkable for long life. He says, "the Laplanders, not being subject to any dangerous distempers, grow old, and live even to a great age: some live above a hundred years, but most to seventy, eighty, or ninety years. Notwithstanding which, they lose not much of their natural vigour, being able to traverse the highest mountains and thickest woods, and manage all other affairs as before; neither get they any grey hairs till they are very old."

We might be almost inclined to suspect, from these statements, that the longevity of some other races of men, instead of falling short of the usual duration of life, rather exceeds the term prevalent in those nations who inhabit most of the countries of Europe. But if we would inquire for instances of advanced age among the peasantry of mountainous countries in England and Wales, where the manners of the people are rustic and frugal, we should find reason for giving up this opinion, and concluding that all nations are, under similar circumstances, nearly on a level, with respect to the duration of their lives.

With respect to the period of full growth, the age of puberty in both sexes, the times at which in females the catamenia commence and cease, and the circumstances attending their periodical return,

* Sheffer's History of Lapland.

some varieties are well known to exist among different nations. It has been asserted that in this last respect, negresses are intermediate between white women and female apes* and baboons; but the fact appears to be, that there is no material difference between the women of Africa and of Europe. Such, at least, is the testimony of the best

* Mr. White, in an ingenious but fanciful work entitled "An Essay on the Gradation of the Human Species," has asserted that "apes and baboons menstruate less than negresses, monkeys still less, and sapajous and sagouins not at all." He accompanies these remarks with an assertion that Negro women are intermediate, in this particular, between white women and apes. This last observation, that negresses have more scanty catamenia than white women is incorrect, as we have shewn above: and as for the notion that apes menstruate at all, it has been proved, by Professor Blumenbach, to be founded on a mistake. This indefatigable philosopher made the circumstance in question a particular subject of inquiry for many years, and the following is his testimony with regard to it. "Fœminis contra non minus proprius sed magis universus, et omnibus communis videtur *fluxus menstruus*, ita ut rectè Plinium mulierem solum animal menstruale vocasse putem. Novi quidem aliis quoque animantibus fœmineis et quidem maximè ex quadrumanorum ordine, passim ab auctoribus tributum esse, ejusmodi fluxum: simiam v. c. dianam ex caudæ apice menstruare dictum esse, &c. At enimvero quoties à viginti inde annis aut in vivariis, aut à circumforaneis monstratas fœmineas simias, papiones, &c. mihi videre licuit, de eâ re quæsivi et passim quidem unam alteramve earum quandoque uterinæ hæmorrhagiæ obnoxiam esse didici, quam vero in nullâ periodum servare, asserebant cordatiores custodes, qui ipsi eam pro morbosâ contra naturæ ordinem affectione habebant, quorumque plures candidè fatebantur vulgò eandem pro fluxu menstruo declarari ut plebis admiratio eo major moveatur."

informed writers. Dr. Winterbottom declares that there is little difference in the age of puberty between the African and the European. With regard to the catamenia he observes, "I am unable to speak with precision respecting this excretion in the natives of Africa, but among the settlers at Free Town, in Sierra Leone, my opportunities of observation were very extensive. It may be proper to remark that these people, who are generally called Nova-Scotians, because brought from that country to Sierra Leone, are blacks who were either carried to America when very young, or were born there of parents who came from Africa. Of course they are sufficiently acquainted with the customs of white people, and they live nearly in the same way as the lower classes of people in Europe. Among the Nova Scotian women, the catamenia have precisely the same appearance as in Europeans, who are equally exposed to the open air; and the same varieties occur with regard to quantity, periods of recurrence, &c. nor have they experienced any material alteration by change of climate." I have frequently made inquiry on the same subject of medical practitioners, who have lived in the West Indies, and the uniform result of this inquiry has been, that there is no difference in respect to the age of puberty, the period of fecundity, or any of the circumstances connected with the catamenia, between white women and negresses.

These testimonies are quite sufficient to esta-

blish the fact, that no diversity exists in respect to the circumstances of this function, which is peculiar to the human kind, between the Negro and European races.

If any race or department of mankind deviates more than others from the common standard in the above-mentioned particulars, I apprehend it to be the Aborigines of America. Among them, although the bodily frame is endowed with great muscular strength and fortitude, the powers of life in the natural and vital functions, as they are termed by physiological writers, are at a low ebb. Dr. Rush says, that out of eight Indians whose pulses he examined at the wrist, he did not meet with one in whom the arteries beat more than sixty-four strokes in a minute. It is commonly supposed, that the fecundity of the American women is less than that of the females in other races,* and that the sexual affections among these people are less powerful. Some writers have indeed plainly intimated a suspicion of an important and specific difference between them and other races of men in these particulars. In order to clear up all doubts on this head, I shall cite the testimonies of some of the best informed witnesses.

Dr. Rush assures us, that the women of the

* Don Felix de Azzara says, in describing the Indians of Paraguay: "*J'admire la hauteur de leur taille, la grandeur et l'élégance de leurs proportions; qui n'ont point d'égales dans le monde; et en même tems, je ne doute pas de leur peu de fécondité.*"

North American tribes seldom begin to be subject to the catamenia, till they are about eighteen or twenty years of age, and that these phænomena generally cease before they are forty years old. "They have the catamenia in small quantities, but at regular intervals. They seldom marry till about twenty: their marriages are rarely unfruitful: miscarriages seldom happen among them. Their labours are short, and accompanied with little pain; and after a few days they return to their usual employments."*

These observations refer chiefly, as it is probable, to the tribes in the northern and middle parts of the United States. In the account which was published by Mr. James, of an expedition to the Rocky Mountains, we have information on many points connected with the physical and moral history of the nations in the interior of North America, on the various branches of the Missouri. In some of the above-mentioned circumstances this account differs from that of Dr. Rush.

"In the young squaw," says the editor of this work, "we were informed that the catamenia, and consequent capability of child-bearing, take place about the twelfth or thirteenth year, and the capacity to bear children seems to cease about the fortieth year; but as superstitious notions prevent these Indians from taking any note of their ages, these periods are stated with some hesitation."

The same writer adds, that child-birth is remark-

* Dr. Rush on the diseases and medicine of the American Indians.

ably easy among these women. Sterility is rare. The usual number of children may be stated at from four to six in a family, but in some families there are ten or twelve.* It is added, that children are often suckled till they are three years of age.* Perhaps this fact, together with the other circumstances of savage life, may fully explain the small number of children in the families of these tribes.

The different ages at which puberty takes place among the American races mentioned in these two accounts, on the accuracy of which we have reason to rely, may be ascribed to the difference of climate.

We are assured by Von Humboldt, that the women of the Chaymas, in South America, are often married at the age of twelve. This celebrated writer is inclined to attribute the precocity of the Chayma women, not to climate, but to a peculiarity of the race†. That he is not correct in this opinion, may perhaps be shewn by comparing the facts related by him with the observations above cited from Dr. Rush and Mr. James.

Some additional observations to the same effect may be collected from a late work published by Professor Keating, of the University of Pennsyl-

* Account of an expedition from Pittsburgh to the Rocky Mountains. By Edwin James, Botanist, &c. to the expedition. Vol. i. p. 214, of the London edition. In the same place the reader will find a copious and accurate account of the physical peculiarities of these races.

† Personal Narrative, vol. iii. p. 232.

vania, containing a series of excellent and interesting memoirs on several of the native races of the American continent. From this work I shall cite some remarks which bear upon the subject now under consideration.

In an account of the physical character of the Potowatomi tribe, belonging to the great Algonquin race, and residing near lake Michigan, we are informed, on the testimony of Metea, a Potowatomi chief, that the period of gestation in the women of that tribe varies from eight to nine months, and is seldom attended with sickness or nausea. The catamenia commonly commence at the age of fourteen, and continue until fifty, and in some cases until the sixtieth year. This last is probably only in cases of disease. Metea added, "That it is not uncommon to see a woman with grey hairs, whose catamenia have not ceased. Irregularities are not uncommon, as well as obstructions: but on these subjects it seems that the informant of the author spoke with reserve."

The same writer has the following remarks on the Dacotas, or Sioux, another American race, distinct from the Potowatomi, and other Algonquin nations.

"Sterility among women is by no means uncommon, neither is it disreputable. It frequently happens that a woman, reputed barren, will bear children if she change her husband. The catamenia commence later among the Dacotas than among the Potowatomis, for with the former they

seldom come on before the age of fifteen or sixteen, while in the latter they appear at fourteen; this difference is easily accounted for, by the more severe climate which the Dacotas inhabit, and by their greater exposure to privations of every kind." "Women are frequently liable, during pregnancy, to lethargy and sick stomach; and we are informed that the Dakota women have their faces covered with spots, in the same manner as white women. Being hardened to exercise, they attend to their usual occupations, even in the last stages of gestation." Many other particulars are added to the preceding, which are not less important in respect to the physical history of the American races. For these I must refer my readers to the original work.*

M. Rollin, surgeon to the expedition under the unfortunate La Pérouse, has given us very sufficient information respecting the physical character of several races in different parts of America, particularly of the natives of the northern coast at Baie des Français, of the people of California, and those of Chili. The following is an extract from his general remarks on all these nations collectively.†

"The natural progress of life," he says, "among these nations, in all its periods of increase and decay, appears to be the same as with us; but the

* Narrative of an expedition to the source of St. Peter's River, &c. By W. H. Keating, A. M. vol. i. chapters 3 and 8.

† Physiological Memoir on the Americans, by M. Rollin.

climate, their mode of life, and other habits, may have introduced some slight differences."

"In Chili and California, the appearance of the beard, and the change of the voice, announce the age of puberty, in males, about the thirteenth year. The girls arrive at puberty about the age of eleven or twelve, of which the enlargement of the breasts, and the appearance of the catamenia, are the usual indications. The quantity in which this periodical phænomenon takes place, varies in different individuals, according to their constitution and manner of living. If no accident interrupt the natural course, it takes place every month, and continues from three to eight days. Women are subject to it until about the fortieth year; but it is not uncommon for some to afford signs of fecundity at a more advanced age."

"Old age and decrepitude announce themselves among these nations, as in civilized countries, by the decrease of the humours, the loss or decay of sight, and other senses, and a change of colour in the hair of the head and beard."

"Women who have borne several children, have their breasts loose and pendant, and the skin of the pelvis corrugated, like Europeans in similar cases, without any observable difference."

"These nations have very nearly the same passions, the same sports, and the same manner of living; are equally violent in the expression of joy and anger, which the slightest action is sufficient to excite."

We are informed by Don Felix de Azzara, that the women of the Charrúas, Guaraní, and all the other savage nations in Paraguay, and the eastern parts of South America, are remarkable for the paucity in which the catamenia* make their appearance and return.

Linnaeus informs us, that the women of the Laplanders have the catamenia, in general, less copious than the Swedes. He adds, that obstructions of the catamenia are very rare among them, excepting those who live in the service of the colonists; these are occasionally troubled with such irregularities, and are subject, in consequence, like the females of other races, to epistaxis and œdematous swellings of the legs.

All these varieties in the catamenia, the time of their commencement and cessation, are scarcely greater than can be found within the limits of the same nation, and therefore they cannot be thought to constitute a specific difference.

Such diversities may be fully explained, by adverting to the influence of climate, to the effects of peculiar modes of life, and to the natural varieties of constitution. It is well known that climates give rise to a considerable difference in the period of puberty, which is much more early in hot than in cold countries, in the same race of people. Marriage and child-bearing are generally observed to commence and cease at a younger age in tropi-

* Don Felix de Azzara, Voyage dans L'Amérique Méridionale, tom. ii.

cal climates than in temperate ones, and to be latest of all in extremely cold countries.* There is also a considerable variation dependant on the habits of society. The women of the peasantry in Europe have a more tardy appearance of the catamenia, than the inhabitants of cities; especially the higher orders. In the state of manners which exists in populous cities, the time at which these phenomena commence is much accelerated; they are greater in degree, and occasion much more disturbance in the system by their excess and occasional irregularities.

The ease with which the women of the negro race are said to bear children, is by no means a circumstance peculiar to them. It has been observed among the females of every savage race. In a less degree the same observation may be made of the women of the lower classes, and especially of those whose habits are frugal and laborious, among civilized nations.

On the whole it appears, that the term of duration, and all the periodical changes of life, are nearly the same in all races of men; allowance being made for the influence of climate, of manners, and all external agents. The age of puberty, the time at which the catamenia commence and cease, the times of their return, the period of

* In Jamaica, says Mr. Long, "the women attain earlier to maturity, and sooner decline, than in the northern climates; they often marry very young, and are mothers at twelve years of age." Long's Hist. of Jamaica, vol. ii. p. 285.

utero-gestation, and all the circumstances connected with child-bearing, follow nearly in the same course among nations most remarkably distinguished from each other in physical peculiarities.

II. If we inquire into the history of the diseases which infect the different races of men, we find nothing which seems to indicate a specific distinction in these races, but on the contrary, a number of facts which render the unity of species the more probable conclusion.

We shall make some remarks, first on contagious and epidemic disorders, and secondly on constitutional diseases:—

1. With respect to contagions, we may observe, that there are some morbid poisons of this kind, which are communicable from one species of animals to another, and which commencing in the brute creation, are capable of affecting the human constitution. The most familiar examples are the poisons of Hydrophobia and the Vaccine disease. The former of these distempers is communicable to a great variety of animals: perhaps to most with warm blood. What species are susceptible of the latter, besides the human, we are not able to determine. It has lately been maintained that some other maladies originating in the inferior tribes have been communicated to men: However, the general fact appears to be, that the influence of morbid poisons is limited to the particular species of animals in which they originate, and that they have no effect on other species, even the most near-

ly approaching in organization and form. This observation may be made generally of the prevalent disorders of brute species, or those which spread, as we term it, in the human race, epidemically, without referring to the circumstance of communication: indeed the pathology of the inferior tribes is so little understood, that we cannot pretend to determine what of their diseases are communicable by contagion, and what are not so. The distempers which attack different species of cattle, are not observed to spread from one to another; however severe their effect may be in the destruction of the particular kind in which they originate. It is said that sheep and pigs have been carried to the West Indies in the same vessel, and that a distemper, apparently contagious, has broken out in the one kind, without in the smallest degree affecting the other. Even among plants it has been observed, that diseases which destroy one species, will not attack even those most nearly allied to it.

Those contagious diseases which belong to the human kind, are very nearly, if not without any exception whatever, confined to it, and quite incapable of producing in the lower animals an analogous disease. Blumenbach has enumerated all the principal eruptive diseases among the complaints peculiar to man. The only exception he makes to this remark, is in the instance of Small Pox, but that probably is rather an apparent than a real exception. According to Jansen, a physi-

cian of Amsterdam, an ape was affected with pustules derived from the contagion of Small Pox, but the animal had not the other symptoms of the disease. Attempts have been made to infect Apes with the syphilitic poison, but in vain. These animals appear thus to be insusceptible of the last mentioned contagion.

Since morbid poisons are so generally limited in their influence to one particular species, we might expect to find some capable of affecting only a particular race of men, on the hypothesis, that there is more than one species in the human kind. But I believe it to be an undoubted fact, that all human contagions, and all epidemic diseases, are capable of exerting their pernicious influence on all the tribes of men, though the natives of particular climates suffer more than others. This with respect to the majority of contagions, is a notorious fact. The Small Pox is well known to have spread its ravages in all quarters of the world. Among the natives of Africa, where it is believed to have first appeared, it has never been more fatal than in the northern regions of Siberia and Kamtschatka. Every race of men has experienced the effects of this destructive scourge. The Plague, Typhus, Rubella, Syphilis, are common to all complexions and varieties of mankind. The only contagious disease which might be supposed to be peculiar to a particular race, is the Yaws, which is in general confined to Africa and the West India islands; but even this distemper is communicable to Europeans,

as we may safely assert on the authority of Dr. Winterbottom, who has seen several instances of its appearance among white men. Elephantiasis is another disease which has prevailed among the inhabitants of particular countries, other nations being in general free from its attacks. This disorder, by some, has been supposed to be contagious, but a predisposition acquired by particular diet and habits of life, and perhaps still more the effect of climate, is requisite in order to its propagation. When once introduced into certain districts, it has been known to spread widely, and to remain endemic, or epidemic, among the inhabitants. Elephantiasis is common among negroes in Guinea.* It was spread in the island of Java, apparently by contagion, in 1661; and we learn from the observations of Pallas, that it has been known in various parts of Tartary, among people of the Tartar and Mongole races.†

It might be thought probable, that the diseases which destroy so great numbers of Europeans in tropical climates, are maladies which confine their ravages to the white races, and that the native people, or the indigenious, are exempt from any susceptibility to such complaints. It appears indeed, that Negroes who have been born and bred up in tropical countries, suffer much less from remittent fevers than Europeans. Both remittent and inter-

* Winterbottom's account of the Negroes, vol. ii. p. 146.

† Pallas. *Voyages en Sibirie*, French translation, in 6 vols. The fact cited is mentioned in many places.

mittent fevers are very rare among Negroes in the West Indies, as well as among the native tribes in their free state on the coast of Guinea, where Europeans suffer so much from these disorders: but Dr. Winterbottom informs us, that they are very common among the Negroes who were brought from Nova Scotia to live at Sierra Leone. The native tribes of America are subject, according to Dr. Rush and others, to remittent, intermittent fevers, dysenteries, and other disorders analogous to those which attack Europeans under similar circumstances.* The native Mexicans are said to have suffered greatly from an epidemic disease, which they termed *Matlazuatl*, and which is supposed to have been the Yellow Fever of modern times.

2. With respect to constitutional diseases, it must be allowed, that there is a difference in vari-

* Valuable information on the diseases of the American Aborigines is contained in the short treatise of Dr. Rush, above cited. More extensive details will be found in the work above cited, published by Professor Keating. See Narrative of an expedition to the source of St. Peter's river, &c. vol. i. p. 128—431, &c. The account here given of the diseases of the Sioux is particularly interesting, and clearly proves, that the morbid causes which affect the constitutions of Europeans, have the same influence, with very slight differences, easily explained, on those of the native Americans. It seems that the latter are subject to the same disorders of the nervous system, excited by mental emotions, as the former. Of this kind are examples of fits, insanity, &c. brought on by disappointments in love, phenomena which are, as it seems, so common as to be often feigned.

ous races of men, but it only amounts to a difference of predisposition, analogous to that which prevails in different families in the same nation. External characters of complexion and figure are known to be associated with peculiar tendencies of constitution; such as we term among Europeans the different temperaments. The Negro, American, and European races appear in like manner to have certain peculiarities in their morbid predispositions, more generally prevalent in each. The constitution of the American is the most torpid; that of the European, in general, the most irritable.

It appears that there is some peculiarity in the Negro constitution, which renders that class of men in general less able to endure the rigour of a cold climate, than white men: they suffer more from scrofula, and tubercular phthisis;* and they certainly are better adapted by natural constitution to a tropical climate. But from the diseases which destroy Negroes in cold climates, Europeans are by no means exempt: nor do Negroes, as we have above remarked, escape the disorders, which are in a greater degree the lot of Europeans in Africa.

* On the other hand, the Sioux, natives of the elevated region near the source of the Mississippi, endure cold better, and suffer less physical inconveniences from it, than Europeans. See Keating, *ubi supra*, p. 431 et seq.

Conclusion of this Subject.

ON the whole, it does not appear, from a review of the principal facts in physiology, as they have been traced among the different races of men, that these races are distinguished from each other by any of those broad outlines, which generally, perhaps uniformly, separate particular species of animals. The great laws of the animal economy are the same in their operation on all. There are deviations in some respects, but these deviations are not greater than the common degree of variety in constitution which occurs within the limits of the same family.

Nothing, therefore, has resulted from the foregoing inquiry that can lead us to consider the several races of men as differing in species. But has any, and what degree of evidence appeared on the contrary side of the question? It must be allowed that there arises, from the facts considered in this section, a presumption, and that perhaps a strong one, that all the races of men are of one species. For if not, there are species of men more closely allied than we know any distinct species of animals to be. Even proximate species, so nearly resembling, that they have often been taken for mere varieties of the same stock, as the wolf and dog, differ, as it would seem, materially from each other, with respect to the laws of their animal functions. No such distinction, nor any thing approaching to it, has been noticed in mankind.

When the physiology of the animal kingdom shall be more accurately known, it will probably bring this question to an issue, on the ground we have already gone over. If there are not any tribes existing of distinct species, which coincide in all the above-mentioned particulars; if, on the contrary, they shall all be found to be divided by strongly marked outlines, such as we cannot discover in comparing the different races of men, then we may derive from these considerations, sufficient argument for concluding that all mankind are of one species.

SECTION II.

Application of the Second Method of Inquiry, founded on the facts relating to the propagation of mixed races, to the present question.

THE subject of this section may be dismissed with a very few remarks. If it be a fact that hybrid races are unprolific, it follows that mulattoes and other mixed breeds in mankind are not hybrid, and consequently that the parent races are of the same species. Whether indeed we adopt such an opinion or not, the circumstances connected with the propagation of mixed races in mankind, point out the foregoing inference as the most probable. If mulattoes intermarried with mulattoes only, the race would remain like the parents; they would always be mulattoes. But if mulattoes intermarry with either white or black people, and progeny is continually blended with the same variety, in the

course of generations, all traces of the European, or conversely of the Negro, will be entirely effaced: the characters of one variety will be entirely merged in the other. Thus many small tribes have lost all their distinctive characters through intermarriages. The descendants of the Colchians, who in the time of Herodotus had black skins and woolly hair, no longer bear these characters, and the continual influx of negro slaves into many parts of Europe and Asia, many of whom intermarry with the natives, produces no permanent impression. Now we can hardly suppose that any thing like this would take place in the case of true hybrids; at least, it seems difficult to suppose that the progeny of one species can be completely assimilated to another, and lose all distinctive characters; that the offspring, for instance, of an ass, could ever become a true horse.

In the population of Paraguay, we have an instance of a mixed tribe, which is said to display even some degree of physical superiority over both of the races from which it is descended. The following account of the mixed progeny of the Spaniards and the South American Aborigines is extracted from the work of Don Felix de Azzara.

This writer informs us that it has been the custom of the Spanish government to include the mixed offspring of Spaniards with Indian women, in the class of white people. He adds, "*Ces métis s'unirent en général les uns aux autres, parcequ'il ne passa en Amérique que tres peu de femmes Euro-*

péennes, et ce sont les descendants de ces métis qui composent aujourd'hui au Paraguay la plus grande partie de ce qu'on appelle Espagnols. Ils me paraissent avoir quelque superiorité sur les Espagnols d'Europe, par leur taille, l'élégance de leurs formes, et même par la blancheur de leur peau. Ces faits me font soupçonner non seulement que la mélange des races les ameliore, mais encore que l'espèce Européenne l'emporte à la longue sur l'Americaine, ou du moins le sexe masculin sur le féminin."

It may be observed with respect to this fact, that the intermixture of varieties is well known occasionally to improve the breed in both the vegetable and animal kingdoms; but that any such effect should follow from the blending of different species, is at any rate improbable, and as far as we know, contrary to the analogy of nature.

Perhaps we have shewn sufficiently that the supposed law respecting the history of hybrid animals is without proof, except in some few instances, and that it is the natural repugnance between individuals of different species that maintains their distinctness. If this be allowed, the facts are still in favour of the same conclusion in the instance of mankind. A very strong contrast in complexion may excite a repugnance, in those for example, to whom the sight of a black or white skin is a novelty; but it is well known that no such principle as this mutual aversion has any general or permanent existence in mankind. It is said, in-

deed, that the Turks and other people of the East, choose negro women for their harems, and it is well known that black men often prefer white women. Indeed, most of the black men who come to England from the West Indies as domestic servants, and continue to reside here, contrive to get English wives; which is a proof, not only of their own good taste in this respect, but also that our countrywomen, the lower orders of them at least, have no invincible repugnance to the negro race.

General Remarks introduced to the Subject.

We now proceed to consider the diversities of mankind in another point of view, according to the plan laid down in the first chapter of this book. Our present subject of inquiry is, how far the differences of complexion, figure, and stature, observed in comparing the several races of men, are analogous to those varieties which, in the inferior animals, often exist without constituting any specific diversity, and, in fact, originate, before our eyes, within the limits of one and the same species. In entering on this subject we shall first take a brief survey of the principal phenomena of diversity, as they appear in mankind. In a future chapter we proceed to compare these phenomena with those observed in the brute species. We shall not attempt at present to give an account of all the varieties of external character which exist in different nations, or of the peculiarities of every race of men. The enumeration

CHAPTER III.

*Application of the Third Method of Inquiry founded on the
Comparison of analogous Variations.*

PART. I.

Account of the Phænomena of Diversity in Mankind.

SECTION I.

General Remarks Introductory to the Subject.

WE now proceed to consider the diversities of mankind in another point of view, according to the plan laid down in the first chapter of this book. Our present subject of inquiry is, how far the differences of complexion, figure, and stature, observed in comparing the several races of men, are analogous to those varieties which, in the inferior animals, often exist without constituting any specific diversity, and, in fact, originate, before our eyes, within the limits of one and the same species.

In entering on this subject we shall first take a brief survey of the principal phænomena of diversity, as they appear in mankind. In a future chapter we proceed to compare these phænomena with those observed in the brute species.

We shall not attempt at present to give an account of all the varieties of external character which exist in different nations, or of the peculiarities of every race of men. The enumeration

of national diversities, as far as it seems necessary to enter upon it, will belong more properly to the following part of this work, which refers to the history, origin, and affinities of particular races. It will be sufficient for the present inquiry, if we examine the most striking and remarkable instances of variety which appear in mankind. If we can draw any tolerably certain conclusion respecting these greater deviations, it will hold *a fortiori* of those which are less considerable.

We shall commence with an account of the principal varieties of complexion.

SECTION II.

Varieties of Colour — Correspondence in the Colours of the Skin, Hair, and Eyes.

It is a matter of common observation that there is a correspondence in the colours of the hair, the skin, and the choroid coat of the eye, in different individuals, or races of mankind. The choroid of the eye displays various hues: it appears red, from the total absence of the pigment which, in other instances, covers its surface; it is of a blue, grey, or green, or of a brown of various shades, down to that hue which is so dark as to be commonly termed black. In general light-coloured eyes are conjoined with a fair complexion and light hair, though there are exceptions to this observation.

But, perhaps, there are scarcely any exceptions to the remark, that the colour of the skin bears

some relation to that of the hair. There seems to be a more intimate connexion of these phænomena with each other, or a dependance of both on the same cause. The albino has uniformly colourless hair, or nearly so, and a white, or very fair skin. The sanguine, or flaxen-haired man, has also a fair skin, often with a ruddy tint, from the blood which circulates in the cutaneous vessels. Black-haired persons have sometimes white skins, but they are never so fair as the flaxen-haired; and when they are very white, they may be considered as etiolated, or bleached, by artificial protection from light. For, when exposed to the heat and light of the sun, the black-haired complexion presently acquires a brown, or yellowish hue, very different from that of the sanguine, whose skin, as well as that of the albino, becomes reddened, inflamed, and blistered. The women of Barbary and Syria are often very white,* though they have black hair; but this is the result of art, and careful protection from the sun. In Europe, black-haired women are termed brunettes, from the hue which their skin acquires on ordinary exposure. Heat and light, or contact with the air, seems to be the necessary stimulus to the secretion of that black substance which tinges the skin. It is so even in the negro race, in which infants are white when born,

* “ Les femmes qui habitent dans les villes de Barbarie sont d’une blancheur presque rébutante, d’un blanc de marbre qui tranche trop avec le rouge très vive de leurs joues.” Buffon, on the authority of Bruce, Hist. Nat. tom. v.

though they soon begin to acquire that colouring substance which the vessels of the cutis are disposed to produce.

SECTION III.

Of the Structure of the parts on which the variety of Colour depends.

THE colour of the eye is well known to depend upon the pigment which lines the choroid tunic. This substance is probably secreted by the vessels of the choroid. In the albino there is no pigment, and the red hue of the eye arises from the blood in the transparent vessels of the choroid and iris.*

The colour of the skin depends upon a substance interposed between the cutis, or corium, and the cuticle. This is very well described by Mr. Lawrence, whose words I shall take the liberty of inserting.

“It is a black layer, about as thick as the cuticle itself, or even thicker, in the Negro; and darker coloured on its dermoid than on its cuticular surface. Putrefaction detaches it with the cuticle from the subjacent cutis; its further progress resolves the soft tissue into a kind of unctuous, slimy matter, readily washed away from the cuticle and skin. It is not easily separated from the former: indeed, it is, under all circumstances, very difficult,

* There are indeed, instances of persons termed albinos and otherwise resembling true albinos, whose eyes are grey or blue; but this is in reality an example of transition from the albino to the sanguine variety, or of an intermixed character.

and where the skin is delicate, quite impossible, to exhibit it detached, in any considerable portion, as a distinct membrane. It agrees with the cuticle in shewing nothing like fibrous texture, in being inorganic and extravascular. It diffuses itself in water, and communicates a turbid cloud to the fluid, like that produced by the pigmentum nigrum of the eye; then subsides as an impalpable powder to the bottom.*

This substance may probably be regarded as a peculiar secretion from the surface of the cutis.

It is only in the Negro that this mucous web, or rete mucosum has been demonstrated; but it can scarcely be doubted that the dark colour of other swarthy, or black races, depends on a similar cause. The Cingalese and Malabars are often as black as the generality of Negroes; the hue of their complexion must arise from the intermediate layer, since the cutis is nearly destitute of colour, and the epidermis is transparent. The complexion fades by insensible degrees from the jet black of the Malabar to the olive colour of the northern Hindoo, and without any strongly marked alteration of bodily structure, that might be thought to point out a diversity of race. Again, swarthy people of a similar description are spread through Persia and western Asia, to the south of Europe; among these we find no very remarkable and sudden change, either of colour or of structure, and

* Lectures on Physiology and the Natural History of Man, by W. Lawrence, F.R. S. p. 275.

the same adust hue, varying in degree, is seen in the tanned or embrowned Spaniard, or Portuguese and among the Arabs and Persians, gradually changing into the olive complexion of Hindoostan. In all these people a black substance seems to be spread, though in more sparing and various degrees, over the white cutis, obscuring it, and rendering it more or less dusky. This is increased, like some other secretions, on exposure to heat and light, against the action of which it appears to defend the cutis. For the skin, even of the European brunets, whose hair is black, is much less injured by exposure to the sun, than that of the flaxen-haired, or sanguine. It becomes brown, or ash-coloured, while the former inflames or blisters.

In Europeans, however, even of dark complexion, it is only a matter of inference that there exists any thing analogous to the rete mucosum in the Negro.*

The hairs issue from roots, or bulbs, situated in the cellular substance beneath the cutis. The bulbs

* On this subject we are indebted to Mr. Lawrence for the most accurate observations. (See Rees's Cyclopædia, Art. Integuments, and Mr. Lawrence's Lectures, pp. 276, 278.)

“Soemmerring remarks that he once found, in an European female, the outer covering of the skin distinctly divisible into two lamellæ; and that he preserves a specimen of it in his collection.”

Mr. Lawrence informs us, “that there is in the Hunterian collection, a portion of white skin with the cuticle turned down: a small portion of a thin, transparent pellicle has been subsequently separated from the cutis.”

have an external vascular root, which is probably the source whence the hair derives its nourishment; there is besides a membranous tube, or sheath, which envelops the hair, and passes out with it through the different layers of the skin. The hair itself consists of an external horny covering, and an internal or vascular part, termed *medulla*, or *pith*. The pith or medulla appears to be endowed with a species of vitality, or organization susceptible of vascular action, since it undergoes certain changes in disease, which cannot be accounted for on any other principle. In the *Plica Polonica*, it is said, that the hairs bleed when cut: it is well known that they become white in old age, and grief and anxiety have been observed to render them white in a very short space of time. Bichât affirms that he has seen at least five or six examples in which such a change of colour has taken place in less than eight days: in one person, known to the same writer, the hair became almost entirely white in the space of one night, the effect of some sudden and poignant grief. It is doubtless in this vascular medulla, whatever its structure may be, that the colour of the hair resides. The outer covering is of a substance analogous to the cuticle, the nails, and the horns of animals.*

* For further information respecting the hair, I refer the reader to Dr. Fleming's *Philosophy of Zoology*, vol. i.; to Mr. Lawrence's *Lectures on Physiology and Nat. Hist. of Man*; to an article in Rees's *Cyclopædia* on hair, by Dr. Macartney; and to Bichât's *Anat. Générale*.

101 The colouring principle is manifestly of a common nature in the skin and hair. It has been asserted by a French anatomist,* who has displayed much ingenuity in his researches into this subject, that the colouring matter of the skin is produced and secreted in the bulbs of the hair. This opinion was formed from an attentive observation of the phenomena which ensue after the black pigment, in the skin of the Negro, has been destroyed, as it often is, by the application of blisters, or by any means producing vesication. In the process of recolorization the black matter first begins to reappear at the pores through which the hairs make their exit. From these pores, as from centres, it is gradually seen ramifying in different directions, and insensibly proceeds to cover the whole space which had lost its colour. This observation receives some support from the fact, that some parts of the body which are most completely devoid of hair, as the soles of the feet, and the palms of the hands, are in the Negro† and other black men, of a much lighter shade than the rest of the body. Still it is scarcely possible that the bulbs can be the only

* Recherches sur l'Organisation de la Peau, &c. par M. Gaultier.

† Not only in the Negro, but in the Hindoo, and in all dark coloured races, the palms of the hands and the soles of the feet are of remarkably light colour. (See an account of the Hindoos in a future chapter.) In spotted Negroes, or Negroes who have white spots on parts of their bodies, it has been remarked that the hairs issuing from the white patches, are themselves perfectly white.

seat of the secretion of this colouring matter, for the skin of the negro is occasionally black in some parts which are quite destitute of hair, as on the inside of the lips. The secreting fabric, whence issues the colouring matter, is apparently spread in a certain degree over the whole cutis.

Whatever conclusion may be the true one on some of these points, it is undoubted that a close connexion exists between the colouring principle in both of these parts; and I shall for this reason, and in order to facilitate comparison, divide the varieties of complexion into certain classes, which will be distinguished from each other by the colours of the hair.

For the sake also of the comparison which is to follow, I shall divide the hair into crinal and pilar, terming crinal that of the head, beard, &c., and pilar that which grows upon the trunk, particularly on the breast and on the limbs. The manes and tails of horses, and other animals, are analogous to the crinal hair of mankind, and the hair which is generally spread over their bodies is analogous to the pilar.

SECTION IV.

Of the principal Varieties of Colour:—1. Of the Melanic variety. 2. Of the Albino variety. 3. Of the Xanthous variety.

TAKING the colour of the hair as the leading character, we find in mankind three principal varieties of colour. In order more conveniently to

distinguish these, I must make use of terms which to some may appear pedantic; but there is no other way of avoiding the necessity of frequent circumlocution, and the repetition of descriptive expressions, which when the thing spoken of is once defined and understood, would be useless and burdensome.

These three varieties are the melanic, including all individuals or races who have black hair; the xanthous, which comprises those who have brown, auburn, yellow, flaxen, red or carrotty hair; and the albino, or white-haired variety, which is also distinguished by red eyes.

1. *Of the Melanic variety.*

The melanic variety forms by far the most numerous class of mankind. It is the complexion generally prevalent, except in some particular countries, chiefly in the northern regions of Europe and Asia, where races of the xanthous variety have multiplied, and it may be looked upon as the natural and original complexion of the human species. This variety is distinguished by the hair, both crinal and pilar, being quite black. The crinal hair in these races is of various texture and growth, from the long and lank hair of the native Americans, to the fine crisp hair of the African Negroes. But varieties in the texture of hair will be considered in a separate place; here we have only to speak of its colour. The hue of the skin varies in the melanic races

from a deep black, which is the hue of some African nations, to a much lighter, or more dilute shade. The dusky hue is combined in some nations with a mixture of red, in others with a tinge of yellow. The former are the copper-coloured nations of America and Africa; the latter the olive-coloured races of Asia. In the deepness or intensity of colour we find every shade or gradation, from the black of the Senegal Negro, or the deep olive, and almost jet-black of the Malabars, and some other nations of India, to the light olive of the northern Hindoos. From that we still trace every variety of shade among the Persians and other Asiatics, to the complexion of the swarthy Spaniards, or of European brunets in general.

2. *Of the Albino variety.*

Examples of the albino variety have been noticed in almost all countries. Either they more frequently occur in dark-coloured races and in hot countries, or they have been more the objects of attention, when appearing under such circumstances.

In Europe they are by no means infrequent; Blumenbach says he has seen sixteen instances in Germany. European albinos present some variety of appearance. Their hair is sometimes as white as that of old age, and not differing in texture from that of the ordinary kind; at others it is of a very pale yellowish white, or cream colour, flowing in long straight bundles of soft, silky texture, which

Blumenbach with reason compares to goat's wool. I have seen examples of both, in persons born in Europe, and of genuine European descent. Those African albinos, who are termed white negroes, have coarse woolly hair of a white colour. The red iris has often a tremulous motion, and the eye is very sensible to light. The skin in European albinos is like that of the very fair sanguine complexion.

The following are descriptions of this variety, as it appears in different races.

Among the copper-coloured native Americans, in the Isthmus of Darien, it is, according to an intelligent eye-witness, remarkably frequent. The albinos or blafards of Darien, are thus described by Wafer:—

“These persons are white, and there are of them of both sexes; yet there are but few of them in comparison of the copper-coloured, *possibly but one to two or three hundred*. They differ from the other Indians chiefly in respect of colour, though not in that only. Their skins are not of such a white as those of fair people among Europeans, with some tincture of a blush or sanguine complexion; yet neither is it like that of our paler people, but it is rather a milk-white, lighter than the colour of any European, and much like that of a white horse.”

“For there is this further remarkable in them, that their bodies are beset all over, more or less, with a fine, short, milk-white down; but they are

not so thick-set with this down, especially on the cheeks and forehead, but that the skin appears distinct from it. Their eye-brows are milk-white also, and so is the hair of their heads, and very fine withal, about the length of six or eight inches, and inclining to a curl."

"They are not so big as the other Indians, and their eye-lids bend, and open in an oblong figure, pointing downwards at the corners, and forming an arch, or figure of a crescent, with the points downwards. From hence, and from their seeing so clear as they do in a moonshiny night, we used to call them Moon-eyed. For they see not well in the sun, poring in the clearest day, their eyes being weak, and running with water, if the sun shines towards them; so that in the day-time they care not to go abroad, unless it be a cloudy dark day. Besides, they are a weak people in comparison of the others, and not very fit for hunting and other laborious exercises, nor do they delight in any such, but notwithstanding their being thus sluggish and dull in the day-time, yet when moonshiny nights come, they are all life and activity, running abroad in the woods, and skipping about like wild bucks, and running as fast by moon-light, even in the gloom and shade of the woods, as the other Indians by day; being as nimble as they, though not so strong and lusty. The copper-coloured Indians seem not to respect them so much as those of their own complexion, looking on them as something monstrous. They are not a dis-

tinct race by themselves; but now and then one is bred of a copper-coloured father and mother, and I have seen of less than a year old of this sort.*

Albinos have been observed in many islands of the Indian and great Southern Ocean. The following is the description of them in Otaheite, by Captain Cook.—“During our stay on this Island we saw about five or six persons whose skins were of a dead white, like the nose of a white horse: with white hair, beard, eye-brows and eye-lashes; red tender eyes, a short sight, and scurfy skins, covered with a kind of white down. We found that no two of these belonged to the same family.”†

An individual of this class was seen on the same Island by Mr. Banks and Dr. Solander, and described by them: “His skin was of a dead white, without the least appearance of what is called complexion, though some parts of his body were in a small degree less white than others: his hair, eye-brows, and beard, were as white as his skin; his eyes appeared as if they were blood-shot, and he seemed to be very short-sighted.”‡

In Java, Ceylon, and other neighbouring islands, albinos are well known. Here, and on the continent of India, they are termed “Chakrelas, or Kakerlakken,” that is, cockroaches. The Rev. Mr. Dubois has thus described the albino variety, as it appears among the Hindoos.—“It is no uncommon

* Wafer's account of the Isthmus of Darien, 1699, also Phil. Transact. 1763.

† Cook, apud Hawkesworth, ii. 188. ‡ Ibidem, p. 200.

mon thing to meet with a class of persons among the Hindoos, who are born with a skin much whiter even than that of Europeans. But it is easy to perceive that it is not a natural colour, because their hair is altogether as white as their skin; and in general their whole exterior appearance is unnatural. They have this distinguishing peculiarity, that they cannot endure the light of the broad day. While the sun is up, they cannot look steadily at any object; and during all that time they contract their eye-lids so as apparently to exclude vision. But in return, they are gifted with the faculty of seeing almost every object in the dark." He adds, "that these individuals are termed by Europeans in India "chakrelas." By the Hindoos they are looked upon with horror, and their bodies, like those of persons labouring under cutaneous diseases, are cast upon a dunghill, or left to be eaten by wild beasts."

Among the black races of Africa white negroes are frequently born; they are looked upon as great curiosities, and are often collected by the black kings, and kept as objects of wonder or ornament. Many of these white negroes, though as I believe not all of them, are albinos. The following are some examples described by eye-witnesses:—

Dr. Winterbottom has described, from his own observation, several instances of this variety occurring in negro families at Sierra Leone and other neighbouring parts of the African coast. The following are selected from them:—

“ At Malacurry, in the Soosoo country, I saw a girl about nine or ten years of age, born of black parents: her skin was of an unpleasant dead-looking white, and pretty smooth, though beginning to assume a cracked appearance, owing to the action of the sun. There was a man of the same colour belonging to this town, but he was then absent.”

“ At Wankapong, I saw a young man about eighteen years of age, tall and well-formed, whose father had been a white negro. This young man's mother, three brothers, and two of his sisters were black, but one sister was white like himself. His skin, from exposure to the sun, had acquired a slight reddish tinge, and was covered with a great number of black or brown spots, like freckles, some of which were nearly as large as a sixpence. It was much rougher and harsher to the touch than the woman's, feeling almost like the skin of a lizard. He complained very much of the action of the sun, which cracked his skin, and sometimes occasioned it to bleed. He was also peculiarly sensible to the bites of insects. His hair was of a dirty white, and woolly; the iris of the eye was of a reddish brown colour, and his sight very weak.

“ At Bottoe, on the Kroo Coast, I saw another appearance of this kind in a man about twenty-five years of age. His parents were black, and had several black children, but they had two white ones, himself and a sister. The man was very tall, rather robust, but awkward in his gait. His skin

was nearly of a cream colour, and freckled from exposure, but so very much unlike that of European sailors, who expose themselves without shirts to the sun, that the difference was very striking at some distance. His eyes were of a reddish colour, and very weak, appearing red round the edges of the tarsi, and constantly winking in a strong light. His skin was uncommonly coarse in its texture, and the sebaceous glands were very large and numerous. He was married to a black woman, but had no children; his sister, whom I did not see, was married to a black man, and had two black children."

Buffon has given a minute description of a white Negress, born in the Island of Dominica, of black parents, who were natives of Africa. She was not quite five feet high, and well proportioned in her body, but not exactly so with respect to her head, which was too large in proportion to the trunk. The author adds, "*Tous les traits de la face sont absolument semblables à ceux des nègresses noires, seulement les oreilles sont placées trop haut.*" "*Les lèvres et la bouche, quoique conformées comme dans les nègresses noires, paroissent singulières par le défaut de couleur : elles sont aussi blanches que le reste de la peau, et sans aucune apparence de rouge : en général la couleur de la peau, tant du visage que du corps de cette nègresse blanche, est d'un blanc de suif qu'on n'auroit pas encore épuré, ou si l'on veut d'un blanc mat blafard et inanimé ; cependant on voyoit une teinte légère*

d'incarnat sur les joues lorsqu'elle s'approchoit du feu, ou qu'elle étoit rémuée par la honte qu'elle avoit de se faire voir nue." "Les mamelons étoient d'un rouge assez vermeil." "Sa tête étoit bien garnie de laine : cette laine est très touffue et frisée, naturellement blanche à la racine et roussâtre à l'extrémité."

"Les yeux sont remarquables par un mouvement très singulier : " ses paupières n'étaient pas plus amples qu'elles le sont ordinairement ; elle pouvoit les fermer, mais non pas les ouvrir au point de découvrir le dessus de la prunelle, en sorte que le muscle élévateur paroît avoir moins de force dans ces nègres blancs que dans les autres hommes : ainsi les paupières sont toujours à demi fermées. Le blanc de l'œil est assez pur, la pupille et la prunelle assez larges. L'iris est composé à l'intérieur, autour de la pupille, d'un cercle jaune indéterminé ; ensuite d'un cercle mêlé de jaune et de bleu, et enfin d'un cercle d'un bleu foncé, qui forme la circonférence de la prunelle : en sorte que vu d'un peu loin, les yeux paroissent d'un bleu sombre."

Many other particulars are minutely detailed in the original description of this individual, to which I must refer the reader ; but the following observation deserves particular notice.

"Au reste, les personnes, auxquelles cette nègresse blanche appartient, m'ont assuré que presque tous les nègres mâles et femelles qu'on a tirés de la Côte d'Or en Afrique pour les îles de la Martinique, de la Guadeloupe, et de la Dominique, ont

produit dans ces îles des nègres blancs, non pas en grand nombre, mais un sur 6 ou 7 enfans."*

In this instance the iris was coloured, and not devoid of the pigment, as it is in perfect specimens of the albino variety. I am disposed to regard this as an approximation towards the character of the flaxen-haired and blue-eyed variety of mankind, as I shall have occasion to remark more fully in the sequel.

3. *The Xanthous variety.*

The xanthous variety is a term which I adopt to include all those individuals who have light brown, auburn, yellow or red hair. With hair of these colours is almost always combined a fair complexion, which on exposure to heat acquires not a black or deep brown hue, but more or less of a red tint; and this is not merely the effect of the blood in the cutaneous vessels, but of a peculiar secretion which imparts its colour to the skin. The pigment of the eye is in this variety of a light colour; a light grey, or azure blue, is the most common hue; but it has sometimes various shades of yellow or brown, and occasionally a green-yellow tint.

This variety passes insensibly into the others; it would be difficult to determine whether some individuals belong to it or to the melanic; and again, the characters of the xanthous variety are in some instances intermixed with, or passing into those of the albino by intermediate gradations.

* See Buffon. Supplement, tom. iv. p. 559 et seqq.

There is something in the temperately cold regions of Europe and Asia, which favours the production of this variety; for it is in these countries chiefly that it prevails, and is in some instances the general character of whole tribes. From this circumstance we must conclude that there is in the local circumstances of these countries some quality congenial to the constitution of body connected with this complexion. Either it springs up more frequently there than elsewhere, or when it casually appears, multiplies and is propagated more extensively. It is not uncommon to find it prevailing in high hilly tracts, while in the neighbouring low grounds it gives place to the melanic variety. But this is not the place to consider the connexion of varieties with local or other causes.

The xanthous variety springs up out of every melanic race. Sometimes it forms the majority of a tribe or nation, though more frequently only a part. The Jews, like the Arabs, are generally a black-haired race, but I have seen many Jews with light hair and beards, and blue eyes.* The Greeks were probably, in Homer's time as now, in general of the melanic variety; yet it appears from the use of such epithets as *πυρρόδης*, *ξανθός*, and *γλαυκῶπις*, that the xanthous complexion was not infrequent. Among the Romans a grey-eyed child was considered as something disgusting, perhaps bordering on the monstrous, which indicates that it was rare.† The

* In some towns in Germany red beards are considered characteristic of Jews.

† Lucretius, lib. iv.

Germans had generally blue eyes, and red or yellow hair in the time of Tacitus;* but among the genuine Celts there were at least some melanic tribes, as the Silures; yet Strabo repeatedly assures us, that the Celtæ of the continent, viz. of Gaul, were nearly as yellow-haired as the Germans. Many of the Russians are light-haired, though the mass of the Slavonian nation is of the melanic kind. And among the ancient Scythians, Herodotus informs us that the tribe termed Budini were xanthous. The Laplanders are generally of the dark complexion; but the Finns, Mordouines, and Votjaks, who are allied to them in race, are xanthous. Many of the northern Tungusians or Mantschu Tartars are of the xanthous variety, though this nation, if we look at the majority, is a melanic one. The same variety appears among the South Sea Islanders, the Aborigines of America, and in many other nations, as we shall have occasion to observe.

The xanthous variety does not only spring up in those melanic races which are of less swarthy shade, such as the nations already mentioned. Among the ancient Egyptians it seems to have arisen occasionally; Diodorus says, that red-haired persons were *not frequent* in the native stock of

* I suspect that the remark on the complexion of the ancient Germans has never applied to the Suevi, the ancestors of the Allemannic Germans, but to the Gothic, Scandinavian, and Anglian races; who are very distinguishable from the eastern Germans, in the present time, by their greater fairness of complexion, and more regular and softer features. See Dr. E. Clarke's Travels in Scandinavia, part i. chap. 1.

Egypt, but light brown hair has been found in Egyptian mummies. And among the negro races of Africa, both in their native climate, and in other places to which they have been transported, the xanthous variety frequently appears. This fact requires some further details.

I have already cited some accounts of the appearance of white negroes. The instances I have selected were examples of the albino variety. It seems to be generally believed that all white negroes are albinos; this appears to be however by no means the fact. On the contrary, I find that a considerable proportion, perhaps the greater number of the individuals termed white negroes, are either genuine examples of the xanthous variety, or resemble that variety in some respects, and appear to exhibit gradations between the albino and the xanthous. Some of them have all the characteristics of the xanthous.

Dr. Winterbottom mentions what he regarded as an intermediate step between the common African complexion and the Albino. It was the instance of a man, who *though born of Negro parents*, was of a mulatto complexion, and much freckled, and who had strong red hair, disposed in very small wiry curls over his whole head.*

Marcgraf saw in the Brazils, an African woman, whose skin and hair were red.†

Dr. Winterbottom remarks, that when the beard

* Winterbottom, ii. p. 170.

† Marcgraf, Tractatus Brasilizæ, p. 12. (Blumenbach, p. 182.)

of a negro has been exposed during the dry season to a hot sun, the ends of the hair frequently acquire a reddish or burnt appearance. This is nothing extraordinary; but he adds, that sometimes this is the natural colour of the hair, independently of exposure to the sun. “In a family at Free Town, in Sierra Leone, the children had red or copper-coloured skins, and woolly hair of a dirty red or singed colour.” “At the same place,” he adds, “I saw a mulatto man, belonging to the Kroo coast, whose hair was a pale red, such as occurs in England, and disposed in very small curls over his head; his skin was very much freckled, his eyes were black, and not affected by the glare of sun-light.” This man was evidently of intermediate variety between the negro and the xanthous.

Blue eyes, or brown eyes, appear to be not uncommon, as well as red or yellow hair, in what are termed white negroes. Dr. Winterbottom describes two white negroes in the Mandingo country, from the testimony of an eye-witness. “In both of these the iris was of a light blue colour, the eyes were very weak, and unable to support the light of the sun; the hair was woolly and white,” the skin was rough, and had red patches here and there. He describes from his own observation, a white negro woman whom he saw at Dumboya, near Wankapong in the Soosoo country, whose parents, brothers, and sisters, were all black. She had borne a black child to a black man, so that no doubt could be entertained of her

being of genuine negro origin. He says that her skin was coarse, dry, and wrinkled. In parts exposed to the sun it was of a reddish tinge, or cream-colour; but in parts less exposed, of a dirty white. Large black spots like freckles, produced by the sun, were scattered over it. These are frequent effects of heat on a skin not fitted by nature, as that of the black negro is, to endure it. The hair of this woman "was of a dirty yellowish white, but woolly and crisp. Her eyes were of a *light bluish* colour, very weak, constantly twinkling. The eyebrows and eyelashes were nearly white." I was informed, says Dr. Winterbottom, that a boy of a similar appearance resided in the neighbourhood.

The skin is sometimes quite healthy in appearance, and the complexion ruddy, like that of Europeans of sanguine temperament. Pallas has minutely described a white Negress seen by him in London, in 1761. She was born of Negro parents in Jamaica, and was sixteen years of age. She was of small stature, fair complexion, with ruddy lips and cheeks. The iris of her eye was neither red nor blue, but of brownish grey colour: her eyes were weak, and impatient of a bright light, which was said to have arisen chiefly from the Small Pox. Her hair, which was quite woolly of texture, was of a light yellow colour, or what the French call "*blond*."* This girl had the ne-

* Pallas. *Novæ Species Quadrupedum*, pp. 10—11.

gro features strongly marked, and had every appearance of genuine negro descent.

A white negro is described by Dr. Goldsmith, who saw him exhibited in London. He says, "upon examining this Negro I found the colour to be exactly like that of an European; the visage white and ruddy, and the lips of the proper redness. However," he adds, "there were sufficient marks to convince me of his descent. The hair was white and woolly, and very unlike any thing I had seen before. The iris of the eye was yellow, inclining to red; the nose was flat, exactly resembling that of a Negro, and the lips thick and prominent."*

In this example the characters of the complexion seems to have been intermediate between those of the albino and the xanthous. The same remark may be applied to the following instance, described by Dr. Winterbottom. He says, "In the colony of Sierra Leone, there is a girl about nine or ten years of age, born in Nova Scotia, who has all the features of a Negro, with woolly hair, of a dirty white colour, and whose skin equals in whiteness that of an European; without any thing disagreeable in its appearance or texture. Her eyes are between a red and light hazel colour, but not much affected by the light." In this instance, however, it must not be omitted, that the parents were both mulattos.

* Goldsmith's History of the Earth and Animated Nature, vol. ii. p. 241.

White Negroes are by no means infrequent in Congo, and we have some curious accounts from early voyagers of a number of them who were kept at the court of the king, or emperor. They are generally described as having a white skin, with grey eyes, and red or yellow hair. A more particular account of these will be given in the sequel.*

If the hair alone were found to vary in the Negro, this would amount only to a singular anomaly, and as such Professor Blumenbach seems to have regarded it: but when we find this combined with blue, grey, or brownish-grey eyes, and a white ruddy skin, it must be allowed that the individuals presenting these appearances are examples of the xanthous variety, and of something approaching to the sanguine complexion, as it is termed among Europeans, though springing up in a Negro race. It appears that some of those called white Negroes are of this character, while others are albinos, and in not a few the peculiarities seem intermediate between these two varieties.†

* The fact of red hair occurring among the Negroes of Congo has been alluded to by Blumenbach, who observes in confirmation of it, that he has seen many Mulattos with red hair; and says that Groben has made the same remark of the Mulattos of Sierra Leone.

† Arthaud has made some remarks which were sufficient to shew that all white Negroes are not Albinos. He says, "Toutes les observations prouvent que les Nègres blancs ne diffèrent des autres que par la couleur: que leur constitution n'est pas aussi robuste que celle des autres Nègres, sans être

We find instances of the xanthous variety springing up in other races of very dark colour. Among the natives of the South Sea Islands, instances of the sanguine complexion now and then occur: in some of these islands they are numerous, in others rare and singular examples. In the island of Otaha, Dr. Forster informs us that he saw one man with a complexion fairer than that of all the rest. He had red hair. In these islands the fair individuals have never been confounded with the albinos.

SECTION V.

Of varieties of form, particularly in the bony structure.

Observations on the principal varieties of the skull.

EVER since the time of Hippocrates, in whose writings some traces may be found of such a notion, it has been the custom to attribute many peculiarities in the figure and features of particular nations to the effect of artificial contrivances, which are put in practice with the intention of modifying, in some manner, the growth and natural shape of parts. Among Negro nations it is said to be a

aussi faibles ni aussi dégradée qu'on l'a dit; qu'ils ont quelque fois de la carnation, et les lèvres vermeilles: que leur tête est convertie d'une laine rousse, et qu'ils ont des poils lanugineux de la même couleur, sur les autres parties du corps; que leur vue n'est pas aussi bonne que chez les autres hommes: que l'iris est diversement coloré," etc. Journal de Physique, October, 1789; cited by Blumenbach. See French edition, entitled, De l'Unité du Genre Humain, et de ses Variétés, p. 275; and a note by the Translator, p. 277.

common practice to compress and flatten the noses of children. The Caribbees, and some other American nations, particularly the people termed, from this circumstance, the Flat-heads, are accustomed to alter, by pressure, the shape of the skull. Other tribes of savage or barbarous people have used a variety of contrivances for distorting, or, according to their own notions of beauty, for improving the shape of their bodies. Even among civilized nations this foolish propensity displays itself. The Chinese women contract their feet, and the ladies in Europe, as medical practitioners well know, compress the lower parts of the thorax in such a manner as to occasion, in cases without number, morbid adhesions of the viscera, and other incurable diseases of the organs of respiration.

But the varieties of form which distinguish most remarkably the different races of mankind from each other, are not to be explained by referring them to the effect of such habits. The most complete proof of this assertion results from the fact, which has been adduced, with the same intention, by Soemmerring, and other anatomists, that, in new-born infants, and even in the embryo of the Negro, as early as the shape of the parts can be distinguished, the peculiar form belonging to the race begins to appear in the most decided manner. Satisfactory evidence might likewise be found to prove that the distinguishing characters of other races of men are natural and hereditary, and not acquired by art. But this assertion, if I am not

mistaken, will now be so readily admitted, that it is unnecessary to accumulate testimonies in relation to it.

Of all peculiarities in the form of the bony fabric, those of the skull are the most striking and distinguishing. It is in the head that we find the most strongly marked varieties in different races. The characters of the countenance, and the shape of the features, depend chiefly on the configuration of the bones of the head.

The first anatomist who attempted to distinguish and describe in an accurate and methodical manner, the forms of the skull which are peculiar to different races of men, was Camper. This celebrated writer, in his facial lines, and the measurement of the angles produced by them, imagined that he had discovered a method of giving a general idea of the form and capacity of the skull, and of the expression of the head and countenance in different nations. His own description of this attempt is nearly as follows.*

“The basis on which the distinction of nations is founded may be displayed by two straight lines, one of which may be drawn through the meatus auditorius to the base of the nose, and the other touching the prominent centre of the forehead, and falling thence on the most advancing part of

* Not having Camper's work at hand at the moment of writing this passage, I have extracted it from Soemmerring, *über die körperliche verschiedenheit des Negers und Europäers*: where it is cited.

the upper jaw-bone, the head being viewed in profile. In the angle produced by these two lines, may be said to consist, not only the distinction between the skulls of the several species of animals, but also those which are found to exist between different nations; and it might be concluded that Nature has availed herself, at the same time, of this angle, to mark out the diversities of the animal kingdom, and to establish a sort of scale from the inferior tribes, up to the most beautiful forms which are found in the human species. Thus it will be found that the heads of birds display the smallest angle, and that it always becomes of greater extent in proportion as the animal approaches most nearly to the human figure. Thus there is one species of the ape tribe, in which the head has a facial angle of forty-two degrees; in another animal of the same family, which is one of those *Simiæ* most approximating in figure to mankind, the facial angle contains exactly fifty degrees. Next to this is the head of the African Negro, which, as well as that of the Kalmuc, forms an angle of seventy degrees, while the angle discovered in the heads of Europeans, contains eighty degrees. On this difference of ten degrees in the facial angle, the superior beauty of the European depends, while that high character of sublime beauty, which is so striking in some works of ancient statuary, as in the head of Apollo, and in the Medusa of Sisocles, is given by an angle which amounts to 100 degrees."

This measurement of the facial angle has been supposed to afford, in the first place, a criterion for estimating the degrees of intellect and sagacity which Nature has bestowed on all those animals possessed of a skull and brain; secondly, when applied to mankind, it becomes, according to the ingenious inventor, a foundation for the physiognomy of nations and individuals, a low facial angle denoting stupidity either in a whole tribe or in particular persons, and the converse; and, in the third place, it is proposed, in the same measurement, to find a distinguishing mark of the principal divisions of the human species. It is this last application of Camper's method that is chiefly connected with the object I have in view, but on the two former I shall offer a few remarks.

1. I can discover no secure foundation for the attempt to form a scale of intellect, and to measure the rank in it, that belongs to each species in the creation, according to the extent of the facial angle. We have no defined notion of the relative degrees of mind or intellect bestowed on different tribes, if, indeed, there are such degrees, nor any way of estimating them. The faculties of each species are perfect in relation to the sphere of existence for which it is destined: the instincts and modes of perception, even in those animals most remote from mankind, as in birds, reptiles, and insects, are all equally adapted to their several ends, and I cannot discover on what principle, founded in truth and reason, any one tribe can be said, in

this respect, to be superior to another. As for intellect, in the narrower acceptation of the term, by which is meant the discursive faculty, though a few extraordinary facts are on record which seem to indicate a degree of it in some animals, it is not to be imputed in general to the animal creation. On the whole, it appears that this scale of facial angles, if it furnishes a sort of arrangement indicative of the different degrees of resemblance which several species bear to mankind in respect to their modes of perception, and some other properties of animal life, which is a very undefined and obscure sort of calculation, can hardly be thought to furnish a measure or estimate of the proportions in which animals are endowed with sagacity, or with any thing analogous to human intellect.

2. As for the application of the facial angle to physiognomy, and the estimate of intellect, either in nations or individuals, it is difficult to say on what principle it is founded. It has been thought by some that a great amplitude, or developement of the brain, which is implied by a large and elevated forehead, is a presumption of great intellectual vigour, just as great muscles denote strength of body and limbs. But this analogy is a very weak argument, and we require some other proof, that an ample size of nervous and cerebral parts, is in general associated with great power in the proper functions of those parts, with which functions the exercise of the mental faculties is allowed to be nearly connected. This cannot be gratuitously as-

sumed: but it is obvious that this is a position capable of being proved or disproved by an appeal to facts, and it is one principal question which is now in agitation among those who devote themselves to the study of craniology. From the zeal with which this study is pursued, we may promise ourselves that, at no very distant period, a certain conclusion may be obtained, with respect, at least, to this general inquiry, into which all the particular ones resolve themselves.

As far as we can at present form an opinion on this matter, I think we must allow, that experience is in favour of the general position assumed by Camper, and by other writers on physiognomical subjects. It is certain that every man is struck with the expression of dignity, or elevation of mind and character in the ancient busts, which have a great facial angle, and that this expression would be lost, if the facial angle were contracted. This perception must be founded, as it would appear, on experience. The fact seems, indeed, to be a general one, that men of great intellect have had fully developed brains, as indicated by elevated and capacious foreheads. It hence appears probable that there is a foundation in nature for Camper's physiognomical estimate of the mental capacities of individuals.

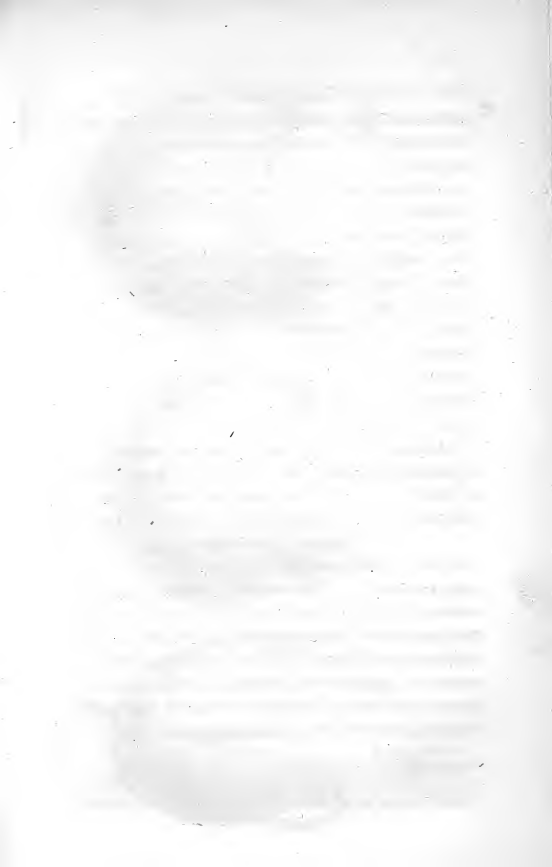
3dly. If we consider the measurement of the facial angle as a method of distinguishing the varieties in the form of the skull peculiar to different nations, it is defective in many particulars, and is

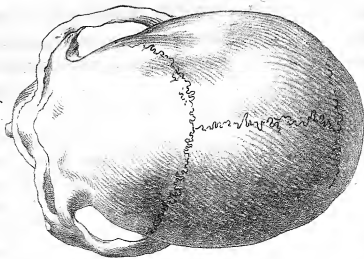
justly liable to the objections which Blumenbach has made to it. It seems only to indicate those varieties of form which depend on the prominence and figure of the forehead and upper jaw-bone, and gives no intimation of the breadth of the face, or of any other peculiarities in the shape of the skull.

The direction of the facial lines is often the same in heads of very different descriptions, which present no other analogy whatever, while it displays, at the same time, remarkable variations in skulls, which are otherwise very similar, and belong to the same nation. "I have," says Blumenbach, "now before me the cranium of a Negro from Congo, and one of a Pole from Lithuania, in which the facial angles are nearly equal; yet, when I compare the narrow, and laterally compressed skull of the African, with the square head of the Sarmatian, I find between them a prodigious difference." He adds, "There are two Negro skulls in my possession presenting very different facial angles, but in all other respects so much alike, that they evidently appear to belong to the same race of men."

It is well known that all those peculiarities in the forms of the skull which are most characteristic of particular races, are yet liable to variation, and to a degree of uncertainty. Hence it appears how little confidence can be placed upon one mode of measurement, or upon so limited and confined a character as the facial angle. It is, indeed, a circumstance to be taken notice of, in the descrip-

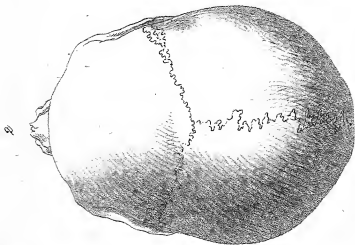
tion of the skulls of different nations, but it does not deserve an exclusive attention, to the neglect of other traits, many of which are equally important. Another remark on the peculiarities in the shape of the skull appears to have originated with Camper, which might have led him to more important and extensive observations. He observed, in his unpublished commentaries on the bones, that the breadth of the head differs in different nations; that the heads of Asiatics, by which he probably meant the Kalmucs, have the greatest breadth; that those of Europeans have a middle degree of breadth, and that the skulls of the African Negroes are the narrowest of all. Blumenbach has made this circumstance the foundation of his arrangement and description of skulls. It does not appear that he was led to it by the suggestion of Camper, but as the result of his own observation, in a long and constant study of his collection of the skulls of different nations. He remarks that the comparison of the breadth of the head, particularly of the vertex, points out the principal and most strongly marked differences in the general configuration of the cranium. He adds, that the whole cranium is susceptible of so many varieties in its form, and that the parts of which it is composed, all contributing, more or less, to determine the national character, are of such different proportions and directions, that it is impossible to subject all these diversities to the mea-



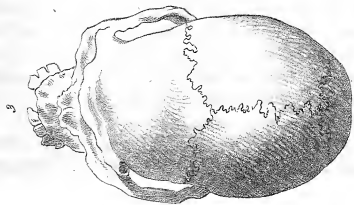


Tongusian

Presented by C. H. Muller, M.D.



Georgian



Negro

C. J. A. A. A. A.

surement of any lines or angles. In comparing and arranging skulls according to the varieties in their shape, it is better to survey them in that method which presents at one view the greatest number of characteristic peculiarities. "The best way of obtaining this end is to place a series of skulls, with the cheek-bones in the same horizontal line, resting on the lower jaws; and then viewing them from behind, and fixing the eye on the vertex of each, to mark all the varieties in the shape of parts which contribute most to the national character, whether they consist in the direction of the maxillary and malar bones, in the breadth or narrowness of the oval figure presented by the vertex, or in the flattened or vaulted form of the frontal bone." This way of examining and comparing skulls is termed by Blumenbach the *vertical method*, in distinction from the facial angles and lines adopted by Camper and others.*

When all the different forms of the human cranium are compared with each other in the way thus pointed out, it seems that there are three varieties in the vertical figure most remarkably distinguished from each other. Of these three forms we have examples in the skulls of a Georgian, a Tungusian, and a Negro of Guinea, which are given by Blumenbach as specimens of the three varieties of

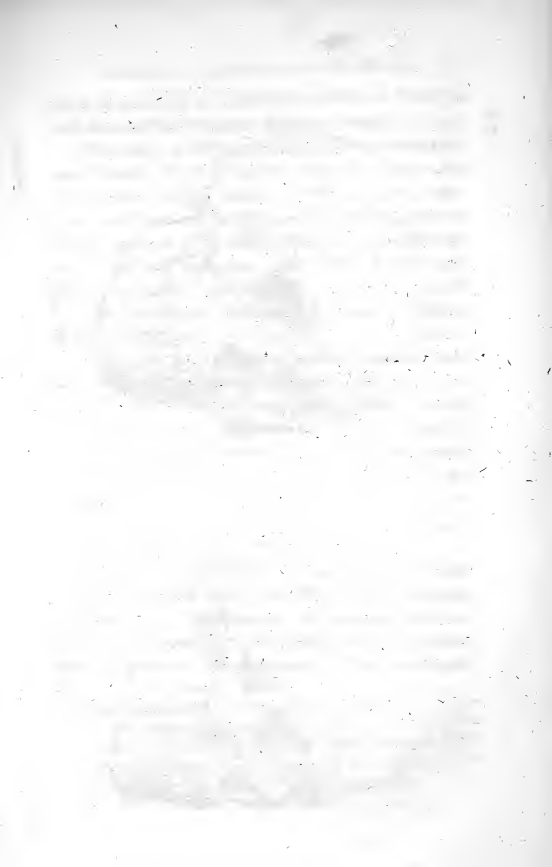
* The annexed outlines of these three skulls, copied from Blumenbach's plate, shew the specimens of the three principal varieties of the human cranium, viewed in the *vertical method*.

the head, termed by him Caucasian, Mongolian, and Æthiopic. "In the first of these," he observes, that "the frontal curve is moderately developed, so as to conceal the edge of the orbital cavities: the upper jaw and cheek-bones are narrow, and of graceful proportions." "In the second the maxillary bones are compressed and prominent." "In the third the space between the eyebrows, the anterior surface of the cheek-bones, and the nasal bones, are nearly on the same plane, and the whole face presents an enormous breadth."

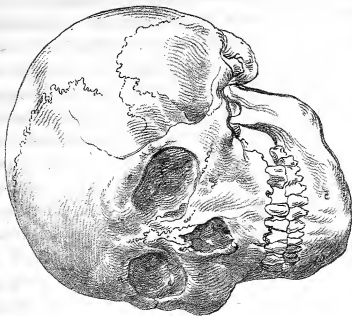
These three forms of the skull differ more widely from each other than any other that can be found in the human genus, according to all the researches hitherto made by anatomists; but to these three, Blumenbach, in his classification of skulls, and of the races of men to which they belong, has added two others, in many respects intermediate between the three forms already mentioned. In this way five classes are established, which this ingenious and learned writer looks upon as peculiar to five great races, or departments of the human family. I shall copy the descriptions which Blumenbach has given of these five classes of skulls, together with his subsequent description of the face peculiar to each variety, as founded principally on the character of the anterior bones.

1.—*Caucasian Variety.*

By this term the author distinguishes that va-

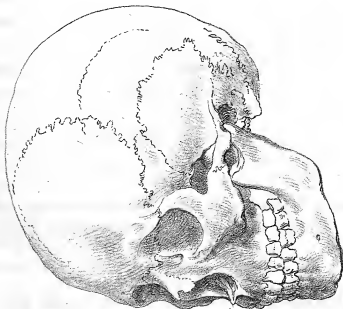


2



Mongole

Printed by C. Hollmann.



Georgian

G. Scherf lith.

riety of mankind to which the nations of Europe, and some of the Western Asiatics, belong.

"The head is of the most symmetrical shape, almost round; the forehead of moderate extent; the cheek-bones rather narrow, without any projection, but having a direction downwards, from the malar process of the frontal bone; the alveolar edge well-rounded; the front teeth of each jaw placed perpendicularly.

The description of the face peculiar to this variety is as follows:

"The face of oval shape, straight; features moderately prominent; forehead arched; nose narrow, slightly arched, or at least with the bridge somewhat convex; cheek-bones not at all projecting; mouth small, with the lips slightly turned out, particularly the lower one; chin full and round."*

2.—*Mongolian Variety.*—*Description of the skull.*

The head almost square; the cheek-bones projecting outwards; the nose flat; the nasal bones, and the space between the eyebrows, nearly on the same horizontal plane with the cheek-bones; the superciliary arches scarcely to be perceived;

* The specimen of this form, given by Blumenbach, is the skull of a Georgian woman. It is engraved in his *Decades Craniorum*, plate 21; from which the annexed engraving (plate 2, figure 1) is copied. It is the same which Mr. Lawrence has copied in his *Lectures on the Natural History of Man*.

the nostrils narrow; the fossa maxillaris slightly marked; the alveolar edge, in some degree, rounded forwards; the chin slightly prominent."

Description of the Face.

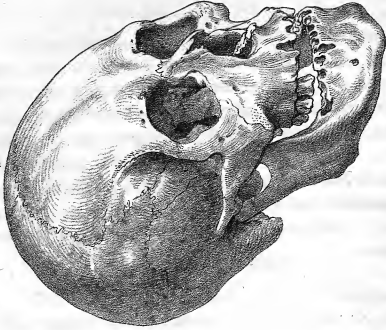
"Face broad and flattened, with the parts imperfectly distinguished; the space between the eyes flat and very broad; nose flat; cheeks projecting, round; narrow and linear aperture of the eyelids extending towards the temples; the internal angle of the eye depressed towards the nose, and the superior eyelid continued at that part into the inferior by a rounded sweep; chin slightly prominent."

3.—*Æthiopian Variety—Description of the Skull.*

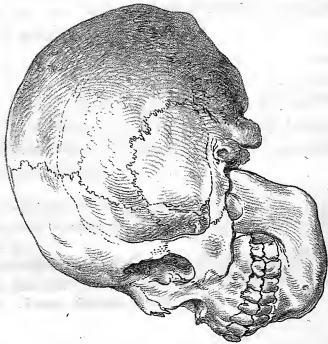
"The head narrow, compressed at the sides; the forehead very convex, vaulted; the cheek bones projecting forwards; the nostrils wide; the fossæ maxillares deeply marked behind the infra-orbital foramen; the jaws lengthened; the alveolar edge narrow, long, and elliptical; the front teeth of the upper jaw turned obliquely forwards; the lower jaw strong and large; the skull in general thick and heavy."

* Blumenbach, *ibid.* Mr. Lawrence's Lectures, p. 326.

The specimen of this variety in the plate (plate 2, figure 2), is taken from Blumenbach's *Decades Craniorum*, pl. 14. The same has been selected by Mr. Lawrence, and forms the eighth plate in his Lectures on the Nat. Hist. of Man.



Aetolian.



Negro or Aethiopian.



Description of the Face.—3

“Face narrow, projecting towards the lower part; forehead very convex, vaulted; eyes projecting (*à fleur de tête*); nose spread, and almost confounded with the cheeks; the lips, particularly the upper one, very thick; the jaws prominent and the chin retracted.”*

These are the three most strongly marked varieties in the form of the skull; the two following are only approximations to these extremes.

4.—*Skull of the American.*

“This variety approaches to the Mongolian. The cheek-bones prominent, but more arched and rounded than in the skull of the Mongole, without being so angular or so projecting at the sides; the orbits almost always deep; the form of the forehead, and of the vertex, often artificially modified: the skull generally light.”†

Description of the Face.

“The face broad, without being flat; the features, viewed in profile, prominent and deeply marked; the forehead low, eyes deeply seated; nose rather flat, but prominent.”

* The representation of this variety (plate 3, fig. 1,) in the annexed plate, is taken from Blumenbach’s *Decades Craniorum*, pl. 19.

† I have given (plate 3, fig. 2), as a specimen of this variety of skull, Blumenbach’s representation of the cranium of an old Aturian. *Decad. Cranior.* pl. 46.

5.—*Skull of the Malays and South Sea Islanders.*

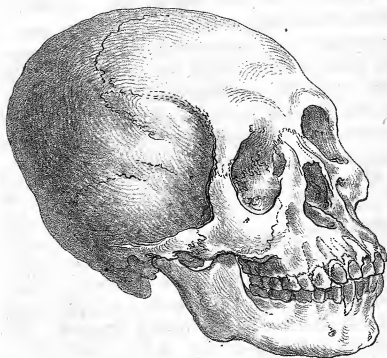
“Summit of the head slightly narrowed; forehead a little arched; cheek-bones not prominent; upper jaw a little pushed forwards; prominence of the parietal bones strongly marked.”

Description of the Face.

“Face less narrow than that of the Negro, somewhat advancing towards the lower part when seen in profile; the features more prominent and better marked than in the Negro; the nose full, broad and thick towards its point (a bottle-nose).”*

These descriptions give a sufficiently accurate idea of five principal varieties in the form of the human cranium; but the attempt to lay them down as the distinctive characters of so many races of men, is liable to strong objections, arising from a fact, of which the ingenious author of this classification was fully aware. The figure of the skull, as well as other peculiarities, is far from being constant and invariable; nor is it possible to divide the human species into different departments, such as can be regarded with probability, as so many distinct families, or races, by reference to this, or perhaps to any other character of structure. That form of skull above described, as belonging to the Negro, is found in the greatest degree among the tribes of

* The specimen of this variety (plate 4, fig. 1), is the representation of the skull of a Bugguess, a native of the Celebes, from Blumenbach's Decad. Cranior. pl. 49.



Bugguefs



people inhabiting the coast of Guinea, and other countries in the western part of Africa. It may be considered as representing the greatest degree of deviation, existing among the African races, from the common or more general type of the human family. But we shall be greatly mistaken if we look upon it as a common character of all the Negro nations, using that term in its usual acceptation. For there are many races of black and woolly headed people in Africa, connected by many other characters, both moral and physical, with the nations of Guinea, who display a very different shape of the head and features from that ascribed by Blumenbach to the Ethiopian variety. Many instances of this kind have been mentioned by Blumenbach himself, in a later essay, entitled, "*Beyträge zur Naturgeschichte*," and many others will be found in a part of this book, treating expressly on the nations of Africa. Some of these tribes of people would, if we were to take the shape of the skull, and the facial angle as an arbitrary principle of distinction, be brought into the same class of people with the Europeans, or at least they approach more nearly to them, if we can judge from the description given by the most intelligent observers, than to the people of Guinea. Yet they could with no degree of probability be referred to the European race. Again, the skulls of the New Hollanders are almost equally compressed with those of the Negroes in any part of Africa; and they would by this classification be

brought within the Ethiopic race; but with what degree of probability could the long-haired people of so remote a part of the world be laid down as belonging to the same race with the woolly-headed Africans? Many other observations might be added to the same purpose, but they are unnecessary. Blumenbach was fully aware that many exceptions of this kind might be taken to every division of races founded on the leading characters of organization. He seems in fact to have regarded the classification of skulls, proposed by him as affording a very broad outline, to which the different tribes of men might be referred, with a view of affording merely a general idea of their character of organization, without drawing any inference as to their consanguinity, or relationship to each other. In this view a method of referring the principal varieties in the cranium to some measurement or arrangement is of great value; and that method, which is founded chiefly on the breadth of the horizontal section of the vertex, is perhaps the best that can be devised. To this purpose, however, it seems to me that a triple division is quite sufficient, and more generally applicable than any other; and I prefer to follow Camper's original suggestion of a triple arrangement of skulls according to the breadth of the vertex.

On this principle I propose to divide the varieties of the skull into three classes, and to distinguish them by names descriptive of their forms,

and not derived from a supposed origin of the nations to which they respectively belong. *Form 1.* The first, which is the most common shape of the skull, may be termed the mesobregmate, or mediate form. In this the horizontal section of the vertex is nearly of an oval figure, and the prominence of the cheek-bones is so moderate as to fall within the outline of that figure, when viewed from above, according to Blumenbach's method.

This form of the skull belongs to all the European nations, excepting perhaps the Laplanders; it is common to many Asiatic nations, not including the Mongoles, Chinese, and some other races, in the northern and eastern parts of that quarter of the world. It is also found in Africa; though most of the African nations deviate towards the second form.

2. Stenobregmate: the section of the vertex narrowed; the skull having the appearance of lateral compression, while the forehead is depressed, and the lower parts of the face lengthened out and protruding: features flattened.

This form exists in the greatest degree among the negroes of Guinea; generally the African nations approach more or less to it. It exists also in greater or less degrees in Madagascar, and through all the great southern ocean, particularly among the New Hollanders, Papuas, Mallicolese: the Polynesian tribes have somewhat of the same character, but in some islands this almost disappears.

3. Platybregmate. Section of the vertex widened, and assuming a square figure, the cheek-bones projecting considerably beyond the outline of this section. This form belongs to the Mongoles, Chinese, and some other Asiatic races who resemble them: it prevails also among the aboriginal tribes of America, who are however distinguished by lesser differences from the Asiatic nations and from each other.

Before I take leave of the subject of varieties in the shape of the head, I shall add some further observations on the peculiarities which occur in the two classes of skulls last mentioned: first in the narrow, or stenobregmate skulls, particularly in the cranium of the Negro; and secondly, in the wide or platybregmate ones, both in those of the Mongole and of the American nations.

SECTION VI.

Further Observations on the Varieties of the Skull.

1. On Stenobregmate Skulls. 2. On Platybregmate Skulls.

THE skull of the Negro is of greater weight and thickness in all its parts than that of any other race of men. It is much denser and heavier, and more brittle: its compact texture and weight give the idea of a stony, rather than of an osseous substance. The principal characters which distinguish the cranium of the Negro from that of the

European, may be comprised under the following heads :

1. Lateral compression. The skull of the Negro receives on each side the pressure of very strong and large muscles, which have much greater bulk and force than those which correspond to them in other races of men. The ridge of the temporal muscle approaches near to the sagittal suture, and covers most of the parietal bone, and, in passing under the zygomatic arch, it forms a large mass of fleshy fibres, the whole greatly exceeding in magnitude, and consequently in power, the same parts, according to their usual conformation in Europeans. The masseter is remarkably thick and strong. The configuration of the bones, in the anterior part of the skull, is in exact conformity with this variety of structure ; the forehead is narrowed, and the face, principally the superior maxilla, extended downwards and forwards. Hence the diameter of the entire head, from the middle of the alveolar process to the occiput, is longer than in Europeans. The cheek-bones take a projection forwards, and the fossa maxillaris is deeply imprinted.
2. As the muscles attached to the jaws are stronger, so the jaws themselves, particularly the lower jaw, is larger, stronger, and more dense than in Europeans ; the mouth is large, and the organs of mastication altogether more powerful.
3. The anterior part of the head being compressed, and the forehead depressed, the space allowed for the brain, particularly for the anterior

lobes of the cerebrum, is smaller than in Europeans, when compared with the size of the whole body, and particularly when compared with the size of the nerves which issue from the skull. The foramen magnum is larger, as well as all the other openings for the nerves which pass out of the skull. The nerves on the basis of the brain are somewhat thicker than those of Europeans; this difference is most remarkable in the olfactory, optic, and fifth pairs.*

4. This last circumstance would lead us to suspect that the organs of sense have a greater development; and this is in a very striking degree the fact. Soemmerring remarked, that all the cavities in the jaw-bone, which contribute to form and protect the organs of sense, are constructed on a larger scale in the Negro than in the European. Nature seems to have made, if we may use the expression, a more careful provision for the perfect and full development of the sensitive power. The orbits are large and capacious; the cavity of the nose has a remarkable amplitude in the Negro, and all the parts which are subservient to the sense of smelling have a very perfect conformation. The upper turbinated bones are large and finely convoluted, presenting an extensive surface for the expansion of the nasal membranes. The passages of the posterior nostrils are wider in the Negro

* Soemmerring über die körperliche verschiedenheit des Negers. u. s. w.

than in the white man. The African has accordingly, as it has been often remarked, a very acute perception of odours. It has been asserted that the Negroes in the Antilles can distinguish in pursuit the track of white and black people by the sense of smell.

It seems then that the presumption arising from anatomical structure coincides with experience in shewing that the powers of sense are very perfect in the Negro. The space allotted to the cerebrum however is proportionably smaller in the Negro than in the European; but whether the faculties of the mind, which are connected with the function of the brain, are less perfect in the Negro than in white men, a conjecture which the shape of the head has led many to adopt, is still a question not fully decided, and on which, as I have no expectation of bringing it to an issue, I deem it fruitless to enter. I shall only remark, that in this question the only appeal is to experience, and that as far as I have had opportunities of collecting information on the subject, from the most judicious observers, the result has been a decided assurance that Negroes are not by any means inferior in intellect to Europeans; at least that, in the sphere of action in which they are placed, no such inferiority is displayed. This has been the almost uniform testimony of many intelligent planters and medical practitioners from the West Indies, with whom I have conversed. Among the former, though this class of men has often been accused

of a sinister bias, their prejudices and interest leading them, as it is said, to undervalue the Africans, I have not met with an individual out of a great number, who has not given a most positive testimony as to the natural equality of the African Negro and the European. It may also be remarked, that instances are not rare in which Negroes have been elevated by the superiority of their mental endowments above the degraded condition in which they are placed, and, in spite of so many political and social disadvantages, have been distinguished as men of science and literature, and poetical genius.*

Before these observations on the form of the skull peculiar to the Negro are brought to a conclusion, it is necessary to take notice of a circumstance which is of importance, both with respect to the subject of physical diversities in general, and with reference to the inquiry just now adverted to. It must be remarked, that the observations of anatomists on the structure of the negro skull, have been drawn from examples in which all the peculiarities are strongly marked; while those in-

* Dr. Lind has mentioned an instance, in his *History of Jamaica*, of a negro Schoolmaster who wrote Latin verses with great elegance. Many examples of learned and ingenious Negroes are given by Dr. Winterbottom, in whose work this question is well discussed. See Winterbottom's *Account of the Native Africans of Sierra Leone*, vol. ii. also some observations cited by him from Blumenbach, in Voigt's "*Magazin für das neueste aus der physik*," a part of which are repeated in the same author's later work, "*Beyträge zur Naturgeschichte*."

stances have been passed over which present no very striking characters. The most intelligent writers have been fully aware of the diversity which may be found among Negroes, if looked for. Blumenbach has mentioned several instances of Negro heads with European features, and which gave no other proof of genuine negro descent, than the colour of the skin and the texture of the hair. And Mr. Lawrence has observed, that "the skulls of Negroes differ considerably in the developement and prominence of the forehead, in the size and arching of the nasal bones, in the projection of the jaws and teeth, the formation of the chin, and in other points." "So that the peculiar construction of the head, on the faith of which some would class these people as a distinct species; is by no means a constant character." It may be added, that innumerable observations to this effect may be found in the works of travellers through countries inhabited by Negroes. Blumenbach has cited Le Maire, Adanson, Ulloa, and others, who assert that there are many Negresses whose features are beautiful, according to the European standard of beauty.* Such instances are chiefly to be found among Creole Negroes, or among Negroes born in countries remote from Africa; these differ decidedly in features from the natives of Guinea, as we shall have occasion in the sequel to prove, by more than one unexceptionable testimony.†

* Blumenbach, *Beiträge*: item Winterbottom, *ubi supra*.

† The reader who wishes for a more minute account of the

The Kaffers, and other nations in the southern parts of Africa, differ considerably from the Negroes of Guinea, in the form of the skull, and the corresponding shape of the features. Cuvier has observed that the cranium of a Bosjesman female examined by him, presented a striking combination of the traits of the Negro with those of the Kalmuck. An opportunity will occur in a future part of this work, of introducing such observations as we can collect respecting the osteological characters of particular nations.

I have already mentioned that the skull of the New Hollander belongs to the stenobregmate class. The most striking difference which presents itself on comparing the heads of the Australians, Papuas, and other nations scattered through the southern ocean, with those of the African Negroes, is the greater elevation of the vertex, or sinciput, which we observe in the former; affording space for a larger brain: while at the same time the cheek-bones and face are broader than in the African.* “The New Hollanders,” says Mr. Law-

craniological peculiarities of the Negro, may consult Blumenbach’s *Decades Craniorum*, Soemmerring; *über die körperliche verschiedenheit des Negers und Europäers*, and Mr. Lawrence’s *Lectures on the Natural Hist. of Man*. In the latter work he will find the subject treated in a most luminous and satisfactory manner.

* Any person may immediately be convinced of this difference by comparing the drawings of the heads of these nations, in Péron’s *Voyage round the World*, or in M. Choris’s *Voyage Pittoresque*. Several skulls of the eastern savages are described by Blumenbach in his *Decades Craniorum*.

rence, "certainly partake of the Negro form, yet are still easily distinguished from African Negroes. In the two heads engraved by Blumenbach, the forehead rather slants above the eyes, but the head rises to a considerable height at the coronal suture; the nose is not so flat, nor the zygoma so prominent, as in the African; the alveolar edge of the upper jaw projects in front; the chin is not cut off, as in the Negro. "The crania of New Hollanders which I have seen," adds Mr. Lawrence, "correspond with these. In some, as in a female skull in the Collège Museum, the superior incisors are placed as obliquely as in the Negro: but none have so low a forehead and vertex as some of that race."

The Papuas of New Guinea, and the islands in the Indian Ocean, resemble the Negroes of Africa much more nearly than do the New Hollanders, particularly in their woolly hair and blacker skins. In the head of a living Papua, described by Sir E. Home, the forehead is said to rise higher, and the occiput to be not so much cut off as in the Negro.* There are other differences, which will be described hereafter.

The skulls of the Mallicolese, according to Dr. J. R. Forster, are more depressed backwards from the root of the nose than any other among these nations; their cheek-bones and face are broad.† And

* Raffles's History of Java.

† Observations in a voyage round the world, by Dr. J. R. Forster.

the skull of a Bugis, from the island of Celebes, engraved from the collection of Blumenbach, has, as that celebrated writer observes, the face in profile falling back, with the prominent jaws, and the oblique position of the incisor teeth peculiar to the Negro; while at the same time the front face, by the breadth of the malar bones, and the distance between the orbits, approximates to the Mongolian.

Most other nations in the Southern Ocean display somewhat of the stenobregmate form in the skull. Some further remarks on their varieties will be found in the account to be given in the sequel of the history and physical characters of these races.

2.—*Observations on the Platybregmate Skulls.*

It seems doubtful whether there are any strongly marked and universal characters which distinguish the skulls of the American nations from those of the northern Asiatics. Travellers who have described particular nations among the Aborigines of America, have often been struck by their resemblance, in features and the shape of the head, to the Kalmuck or Mongole race. To this race many other nations in the North of Asia bear a strong resemblance. From the numerous assertions, to be found in a variety of authors, of this analogy, it would appear to be very decidedly marked;* and we do not find that any clearly de-

* "What we have been stating as to the exterior form of the Indigenous Americans," says Von Humboldt, "confirms the

fined difference has been generally proved between the two classes of nations. Blumenbach has indeed remarked some points of distinction between the skulls of some American nations and those of the Mongoles. But the American crania in his possession, were chiefly those of Caribbee Indians, and other eastern races, which have some peculiarities not common to other Americans. The Baron Von Humboldt mentions, as a characteristic of the American races, "a facial line more inclined, though straighter than that of the Negro;" and he adds, "that there is no race of men upon the globe, in which the frontal bone is more depressed backwards, or which has a less projecting forehead." But this observation will not apply equally to all, and probably not to the greater part of the American races. On this subject I shall cite the remarks of a writer who speaks from extensive personal observation. "The facial angle of the American cranium has been represented by Blumenbach at 73° , an obliquity which induced him to place the American Indian in his series of the varieties of the human race, as the fourth in number. But his observations of other travellers as to a striking analogy between the American and the Mongole races. This analogy is particularly evident in the colour of the skin and hair, in the defective beard, high cheek-bones, and in the direction of the eyes. We cannot refuse to admit, that the human species does not contain races resembling one another more than the Americans, Mongoles, Mantchoux, and Malays." Von Humboldt's New Spain, vol. i. p. 153.

tions were made on the cranium of a Carib, and will not rigidly apply to the Western Indian, who certainly possesses a greater verticality of profile. Agreeably to the mensurations of Dr. Harlan, a cranium which we obtained on the plains of the Platte, exhibits an angle of 78° ; a Wabash male, 78° ; female, 90° ; and a Cherokee only 75° .

Other points of difference may be referred to the direction of the orbits, the degree of prominence in the nose, and the shape of the cheek-bones.

"The line of the direction of their eyes is nearly rectilinearly transverse," says the writer above cited, in describing the lineaments of the Indians on the Missouri. "This," he adds, "is intermediate between the arcuated line of the eyes of Europeans, and that of the Indians of New Spain, who, according to Von Humboldt, have the corners of the eyes directed upwards towards the temples."

"The noses of the Indians in the interior of North America, are generally prominent and aquiline, with the wings not more dilated than those of white men. The pug-nose, and the more common form of the noses of the white Americans, of a concave outline, are regarded as remote from the standard of beauty. The lips are more tumid than those of the white Americans, but very far less so than those of the Negro. The lower jaw is large and robust; the teeth are very strong, with broad crowns; the chin is well formed."

It appears from this description that these tribes

differ from the Mongoles, in having prominent noses; but other nations of aboriginal Americans, as particularly several tribes in South America, who will be mentioned in the sequel of this work, appear to have as flat noses as any of the Asiatics.

The cheek-bones are said by all writers to constitute one of the most peculiar features of the Americans. Blumenbach and Von Humboldt have made this remark. "The cheek-bones," says the writer before cited, "are prominent, but not angular, like those of the Mongole, and stamp a peculiarity on the contour of the face, characteristic of the American Indian."*

"The expression of the countenance is austere; often ferocious." This is a remark repeatedly made by the most observant travellers. "The females have broader faces, and a more lively expression."

The nasal cavities are large in the American head. This has at least been observed in several

* These remarks are confirmed by observations on the Potowatomis, and other aboriginal tribes, by Professor Keating, of the Pennsylvanian University, in the narrative of a late expedition to the Source of St. Peter's River. In describing Metea, a Potowatomi chief, this intelligent writer says, "Like most of the Potowatomis whom we met with, he is characterized by a low, aquiline, and well shaped nose; his eyes are small, elongated, and black; they are not set widely apart; his forehead is low and receding; the facial angle amounts to about 80°. His hair is black, and indicates a slight tendency to curl; his cheek-bones are remarkably high and prominent, even for those of an Indian; they are not however angular, but present very distinctly the rounded appearance which distinguishes the Aboriginal American from the Asiatic." (Vol. i. p. 85.)

skulls, as in a cranium described by Blumenbach, who connects this circumstance with the powerful sense of smell for which these barbarians are celebrated.*

The occiput is somewhat flat, and the protuberances, which mark the seat of the cerebellum, not very prominent; though in the Missouri Indian, they are still marked and distinct.†

Blumenbach has observed that the skulls of the Americans are generally light. In this respect the Americans form a remarkable contrast to the Negroes, who have very heavy and massive skulls.‡

One of the most remarkable peculiarities of the American head, and one most generally observed by Blumenbach, is the largeness and depth of the orbits.§

It may be questioned whether any of these characters are uniform and constant. According to Blumenbach the Esquimaux approach very nearly to the northern Asiatics: they are arranged under

* Decad. Cranior. tab. 9. "Amplissimæ verò olfactûs officinæ egregiè his respondent, quæ apud auctores peritos de summâ istorum barbarorum odorandi acie relata legimus."

† Compare Von Humboldt, vol. i. p. 155. James's Account, &c. vol. ii. p. 3.

‡ Azzara relates a circumstance, which, if true, is remarkable. "Un homme qui avait vécu longtems parmi les Guaranyes Chrétiens (in Paraguay) m'assure, qu'il avoit observé dans les cimetières, que les os de ces Indiens se convertissaient en terre beaucoup plutôt que ceux des Espagnols." Azzara. Voy. dans l'Amérique Méridionale, tom. ii. p. 59.

§ Decad. Cranior. tab. 38.

the Mongolian rather than the American form. A skull from an Indian burial ground, supposed to have belonged to an Illinois savage, which was presented to Blumenbach by Dr. Barton, approaches more nearly to the Caucasian or European than to the Mongolian form;* and Von Humboldt assures us, that some tribes of Indians have European features.

On the forms of particular nations, both among those northern Asiatics who have platybragmate skulls, and among the American races, we shall have occasion to adduce further observations in a more proper place.

SECTION VII.

Varieties in the Figure and Proportion of Parts.

IN the shape of the body, in the size and proportion of the limbs, and in the degree of strength and agility which result, there are some remarkable varieties among different nations. Some Negro tribes, the Australian Savages, or New Hollanders, and the Kalmucks, appear to be those races who differ most in figure from Europeans.

Soemmerring has given a very good outline of the peculiarities in the figure of the Negro. The following are the most important of his observations:

Daubenton first made the remark, that the foramen magnum is placed in quadrupeds behind the centre of gravity; while in man it occupies the

* Decad. Cranior. tab. 38.

centre. In the ourang outang and other apes it is behind the centre, and hence the upright posture is unnatural to them. Soemmerring thought he discovered that in Negroes this foramen is not placed exactly as in Europeans, but a little more forwards on the vertebral column, whence the occiput projects less behind the spine.*

The ribs are often large, and more roundly curved in Negroes than in Europeans; and it appears that the sternum more frequently receives the cartilages of eight ribs on each side.†

The bones of the pelvis are more slender in the Negro, and the dimensions of this cavity smaller, than in Europeans. This is at least the case with respect to males, in whom chiefly the measurement has been taken.‡ In females the pelvis is said to be larger and more capacious than in Europeans.§ This observation has perhaps taken its

* Soemmerring, however, speaks doubtfully on this subject:—"Etwas wenigens mehr nach hinten als bey uns, scheint mir dies loch bey m Mohren zu legen."—p. 45.

† In this circumstance Soemmerring thought he had found a resemblance to the Simiæ; but there was no sufficient ground for his conjecture. The number of true ribs in some of the Simiæ is greater, but in other instances less, than the usual number in human bodies.

‡ Several measurements are given by Soemmerring, pp. 34, 35, of his essay, entitled, "Ueber die körperliche verschiedenheit des Negers von Europäer;" and by Mr. Lawrence, in p. 397 et seq. of his "Lectures on Physiology and the Nat. Hist. of Man."

§ I know of no actual measurements by which this assertion is ascertained or refuted. It is made by Mr. White, of Man-

rise from the comparative ease with which negro women are well known to undergo parturition. There is also some difference between Negroes and Europeans, in the length of the upper limbs. It appears to be ascertained, by numerous measurements, that the fore arm is somewhat longer in the Negro, in proportion to the upper arm, and to the height of the stature, than it usually is in Europeans. Mr. White assures us that he has measured the arms of about fifty Negroes, men, women, and children, born in very different climates, and has found the lower arm longer than in Europeans, in proportion to the upper arm, and to the height of the body. He has formed a table, containing the measurements of the first twelve Negroes he met with, compared with twelve Europeans, taken without selection, and has given the result as follows: "By a careful admeasurement I found that not only in the twelve, but in all the fifty negroes, the length of the lower arm was greater than in those Europeans of corresponding stature." "I am informed," he adds, "of a negro skeleton in St. Bartholomew's Hospital, in which the radius and ulna are no longer than the medium of Europeans; but as Africans, as well as Europeans, are liable to some variations in this particular, one or two exceptions have no force against the general inference." In these proportions the Simiæ differ from Manchester, in his ingenious, though fanciful work, on the "gradation in man towards the brute kinds," on the authority of several surgeons of Guinea ships.

kind; but the difference is greater between the former and Europeans, than between the Simiæ and the Negro: if we may judge of the Negro by the above admeasurements. If therefore appears that in this respect the generality of Negroes approach somewhat more nearly to the structure of the ape than the generality of Europeans; but if we consider individuals, there is no such approximation, for there are many Europeans whose fore arms are as long as those of the generality of Negroes, and there are Negroes who in this particular resemble the majority of Europeans. The fingers and toes of Negroes are observed by Soemmerring to be very long, and finely formed. In their greater length there is a resemblance to the Ape. It appears that sesamoid bones are frequent in the Negroes. The same author has also remarked, that in the Negro the bones of the leg appear to be bent outwards, under the condyles of the thigh bone, so that the knees stand further apart, and the feet are turned more outwards than in Europeans. This observation applies to two negro skeletons in his possession, and to more than twelve living individuals whom he has seen.* The remark is confirmed by Mr. Lawrence. He says, this peculiarity "is seen in the cast of the Negro belonging to the College Museum. The tibia and fibula are more convex in front than in Europeans. The calves of the leg are very high, so as to en-

* Soemmerring, § 42.

croach upon the hams. The feet and hands, but particularly the former, are flat; the os calcis, instead of being arched, is continued nearly in a straight line with the other bones of the foot, which is remarkably broad.* This high position of the gastrocnemii muscles, and the clumsy form of the legs, have been observed repeatedly, as well as the flatness of the feet† and large size of the hands. "The only peculiarity," says Dr. Winterbottom, "which struck me in the black hand and foot, were the largeness of the latter, the thinness of the hand, and the flexibility of the fingers and toes."‡

These are the most remarkable peculiarities in the form of the Negro which have been noticed by anatomists. The varieties of figure belonging to the Kalmuck and Australian races are not of so much importance as to render it necessary to describe them in this place; I refer the reader for an account of them to a future portion of this work, in which the history of particular races will be considered.

* Lawrence, *ubi supra*, p. 408.

† White, *ubi supra*, p. 54.

‡ Winterbottom's Account of the Negroes of Sierra Leone, vol. ii. p. 257.

CHAPTER IV.

Application of the third Method of Inquiry continued.

Part 2.—Survey of analogous phænomena in other Species of Animals.

SECTION I.

Examples of this Analogy in respect of Colour.

WE now proceed to compare those phænomena of diversity in the human kind, of which a survey has been taken in the preceding chapter, with the variations in form, colour, and the structure of parts, which display themselves in the lower tribes, and particularly in the domesticated animals. We shall begin with the varieties of colour in the latter, and shew how far they are analogous to the diversities already described in the tribes of men.

1. There are few species which do not afford specimens of a colour and description analogous to the black-haired variety in mankind. Rabbits, cats, dogs, hogs, foxes, horses, asses, oxen, sheep, fowls, with black hair or wool, or plumage, are familiar examples.

2. The albino variety is almost as abundant. It occurs in most domesticated quadrupeds, as in cats, rabbits, dogs, oxen, asses, sheep, hogs, goats. It

has been found in monkeys, squirrels, rats, mice, hamsters, moles, opossums, weasels, martins; in the polecat, of which the common ferret is supposed to be the white variety.* In the buffalo, the roe, the camel,† elephant,‡ rhinoceros, the stag and the jaguar of Mexico,§ the common bear of northern Europe,|| the badger and beaver,¶ it has been occasionally found. Several species of birds, as crows, blackbirds, canary-birds, partridges, fowls, peacocks, exhibit similar phenomena, having their feathers of a pure white colour and their eyes red.**

3. The xanthous variety is not less familiarly known. Rabbits, dogs, oxen, cats, with light brown or yellow hair afford examples of it. The chesnut-horse, which has the mane and tail of a light yellowish brown colour, is precisely analogous to the xanthous complexion in mankind.

All these varieties in the colours of animals sometimes spring up casually and sporadically; in other instances they are generally prevalent in particular breeds. Blumenbach has noticed

* Blumenbach. De l'Unité du Genre Humain.

† Shaw's Zoology.

‡ White elephants are mentioned by *Ælian*. De Animal. lib. iii. cap. 46.

§ Von Humboldt mentions a white variety of the *Cervus Mexicanus* and of the *Jaguar*.

|| Pallas Spicileg. Zoolog. Fascic. 14.

¶ Pennant's Hist. of Quadrupeds.

** Blumenbach, *ubi supra*.

many examples of this kind. He remarks that all the swine of Piedmont are black;* those of Normandy, white; and those of Bavaria of a reddish brown colour.† The same author observes that the oxen of Hungary are of a greyish white; in Franconia, they are red. Horses and dogs are spotted in Corsica. The turkeys of Normandy are black; those of Hanover almost all white. In Guinea the dogs and the gallinaceous fowls are as black as the human inhabitants of the same country.‡

Ælian informs us that Eubœa was famous for producing white oxen; it was termed *Αργυβοεία*.§

The same writer says, that the river Xanthus was supposed to have received its name from the yellow fleeces of the sheep which fed upon its banks. The water of this and some other rivers was fancied by the ancients to render the wool of sheep yellow.||

In the Mysore there are three varieties of colour

* He says, "when I passed through that country during the great fair for swine at Salenche, I did not see a single animal of any other colour than black."

† Blumenbach's *Beyträge zur Naturgeschichte*. Some of the remarks contained in this work were previously published in the "*Magazin für das neueste aus der physik*," in a paper which was translated and published in the *Philosophical Magazine*, vol. iii.

‡ Blumenbach de l'Unité du Genre Humain.

§ Ælian, lib. xii. cap. 36.

|| Ælian de Animal. lib. viii. cap. 21.

in the sheep; they are red, black, and white, and these are not distinct breeds.*

M. Gmelin informs us that the cats of Tobolsk, in Siberia, are generally of a red colour.

The ass of the Carnatic presents singular varieties of colour: some are of the usual ash-colour, while others are almost black, in which case the cross on the shoulders disappears. Milk-white asses are also to be found, but they are rare. These are not distinct species, for black individuals have sometimes ash-coloured colts, and vice versa.†

Some remarkable facts are mentioned by Azzara with relation to the colour of horses and oxen in Paraguay. It is well known that both these races have run wild in South America, and the climate being congenial to them, have multiplied prodigiously in the fertile plains in the neighbourhood of the river Plata. Azzara says that all the wild horses are of a chesnut or bay-brown colour, while the tame horses are of all colours, as in other countries. Hence he conjectures this to be the original colour of the race. He makes a parallel observation respecting the oxen:—"La couleur des troupeaux domestiques," he says, "varie beaucoup; celle des sauvages est invariable et constante; c'est-à-dire, brun-rougeâtre sur le dessus du corps, et noir sur le reste; une de ces deux couleurs domine plus ou moins. Cela peut faire

* Dr. F. Buchanan's Journey in Mysore, Canara, and Malabar.

† Ib. ubi supra.

soupçonner que le couple primitif de l'espèce, étoit de cette couleur que l'on appelle *osco*.*

In England we may observe different colours prevailing in the cattle of particular districts. Thus in Devonshire all the horned cattle are brown: in other counties they are variously spotted.

Animals of a light colour have their eyes often of a light hue.† Some species are however pretty uniform in the colour of the pigment, notwithstanding varieties in the hair. The iris of the horse is of the same hue in black and white horses; but in the cream-coloured horses, the iris is also cream-coloured.

Animals of the albino variety probably have the same condition of the eyes, which is so commonly observed in the human albino. A white mouse in the possession of Blumenbach exhibited intolerance of light: it kept its eyes closed even in the twilight.‡

In animals whose hair or wool is black, the skin is well known to be also of a dark or black hue. In this there are varieties. Hunter remarks, that the skins of the black and of the white horse are of the same colour; which he explains by the fact that all foals are of the same colour, and that though the hair becomes afterwards different, the skin

* Azzara, Voy. dans l'Amérique Mérid. tom. i. p. 578 et seq.

† I have seen a yellow-haired dog with one eye of a blue colour.

‡ Blumenbach in Comment. Reg. Soc. Scient. Gott. vol. vii. cited by Mr. Lawrence, p. 293.

retains its original hue. This appears to be a singular anomaly. That the skin generally varies with the hair or fur, is well known to furriers, and to those who prepare the skins of animals for various purposes. It has been remarked, that the skin of the black buffalo is of a particularly dark colour. The hue of this species is generally black, but varieties are seen, white, grey, and of a bay or reddish colour.*

SECTION II.

Remarks on this analogy, between the varieties of Colour in Men, and those in other species of Animals.

THE foregoing comparison between the varieties of colour in mankind, and those which occur in other warm-blooded animals is complete as far as it respects the colour of the hair. The Melanic races of men are analogous to animals with black hair; those of the Xanthous variety to light

* So close is the connexion between the colour of the skin and that of its hairy or woolly covering, that it has been deemed of importance to ascertain in the ram from which the flock was to be bred, the colour of the skin, by inspecting his mouth. If there was the least blackness or swarthy in the tongue or mouth, the ram was rejected from the flock, that he might not communicate an injurious taint to the fleeces of the lambs.

“Illum autem, quamvis aries sit candidus ipse,

Nigra subest udo cui tantum lingua palato,

Rejice; ne maculis infuscet vellera pullis

Nascentum.”

Georgic. iii.

See Bakewell on Wool, p. 150.

brown, or bay, or yellow-haired animals; and the Albinos in the human kind, to white-haired animals with red eyes, which are well known.

But it does not appear that this comparison throws any light upon those varieties which distinguish the several melanic races from each other. There is nothing, as far as I know, in other species, exactly parallel to that difference in the hue of the skin or in the shade of colour, which is found between a black-haired individual of the European race, and the African Negro, or the Peruvian. In all these tribes of men, the hair, both crinal and pilar, is quite black: they are therefore all analogous to those animals whose hair, or fur, or wool is black. It is well known that in animals with black fur or hair, the skin itself is of a blackish hue, more or less intense; but nobody has made any observations which tend to shew that the shade of colour varies in intensity in the same species in a manner analogous to the gradation of shades which we remark in mankind, when we compare different melanic races; nor does it appear probable that anything precisely analogous will be found.

In the sequel we shall endeavour to find some other way of determining whether the different shades of complexion in the melanic races come within the limits of one species. In the mean time we may remark that this difference is perhaps not so considerable as that which occurs between the

Melanic, Xanthous, and Albino varieties. In the latter instances the secretion which gives its hue to the complexion is different in kind: in the former it chiefly differs in degree. And we shall prove by adducing a number of facts that these degrees insensibly pass into each other. There are, in reality, many nations of the melanic variety, in which some tribes, or families, approach to the extremes of whiteness or blackness in complexion, which fall within the limits of this variety, as before defined. And this takes place in instances where we cannot refer the phenomenon to any mixture of races. Nor is it surprising, when we consider how frequently the xanthous and albino varieties spring up out of the melanic.

SECTION III.

Of Peculiarities in the constitution connected with the Varieties of Colour.

MANY writers have called the Albino a diseased variety of mankind: others have thought the Negro owes his blackness to a particular disease; both these suppositions are groundless, but it is obvious that if they were established, they would throw no light upon the nature of the varieties in question, or on their causes; since a congenital disease is only an example of that variation of structure which is so general a phenomenon among organized beings of all classes.

But there is a certain laxity or delicacy of con-

stitution and structure connected with the peculiar hue of the light-coloured varieties. White has often been termed, from Lord Bacon's time, the colour of *defect*. The whiteness of hair is owing to a defect of a peculiar secretion. This may be confined to the pilar structure, as in horses which have patches of white hair on places where the skin has been rubbed and injured; or it may be conjoined with weakness of structure or want of vigour in other parts, or in the whole constitution. The feet of horses are thought to be more tender and susceptible of disease when white than when of darker colour. The hoariness of old age is a want of secretion connected with defect of vigour. The oxen of Hungary are said to become white after castration.*

In the human Albino the want of the secretion which gives colour to the hair, eye, and skin, is connected with a peculiar delicacy of constitution.

The Xanthous variety appears to have a degree of the same delicacy. Medical writers, from the time of Galen, have remarked a certain degree of irritability and delicacy of constitution in what they term the sanguine temperament. Persons of very fair complexion are often less robust than those of more swarthy hue; and they are more subject to a variety of diseases. Men of the chole-

* Blumenbach, p. 131, sect. 38. The whiteness of some animals during winter, is apparently owing to the defect of the secretion of colouring matter, for promoting which the stimulus of heat is necessary.

ric and melancholic temperaments, which are both characterized by black hair, are well known to have generally sounder and more vigorous constitutions, and to be less susceptible of morbid impressions from external causes than the sanguine. The Negro constitution has some peculiar morbid predispositions, but in many respects is endowed with greater vigour than that of lighter complexion. The muscular fibre in the Negro is said to be of a brighter red than in the generality of men, and apparently capable of more vigorous contraction.*

SECTION IV.

Of the Varieties of Texture in the Human Skin, and of some analogous Phænomena in other Species.

BESIDES the variety of colour, other peculiarities have been remarked in the skin of the Negro, and of some other races.

Dr. Winterbottom says that the skin of Negroes is always cool, at least more so than that of Europeans in the same climate, and that it is also remarkable for its sleekness and velvet-like softness.† A parallel observation has been made by Bruce and other writers respecting several African tribes.‡ The skin of the Otaheiteans is of a similar kind.§ This coolness and softness of the skin depends probably on the rete mucosum, for Albinos, both among the Africans and Otaheiteans,

* Brown's Travels.

† Winterbottom, vol. i. p. 180.

‡ Bruce, vol. iv.

§ Hawkesworth, vol. ii. p. 187.

are remarked to have skins which become rough, blister, and crack easily on exposure.* The same state of the skin has been observed among the Sumatrans† as well as among the Caraibs and in the women of Asiatic Turkey.

Burckhardt has made some singular observations on the skin of the Negro, which seem difficult to reconcile with the foregoing : he says, "the Arabs of Berber are chiefly distinguishable from the Negroes by the nature of their skin, which, though very dark-coloured, is as fine as that of an European, while that of the Negro is much thicker and coarser." He remarks also of the Nouba slaves that "the palm of their hands is soft, a circumstance by which they particularly distinguish themselves from the true Negroes, whose hands, when touched, feel like wood."‡

The unctuous softness of the skin in the Negro, and other dark-coloured races, is probably connected, as Blumenbach has supposed, with a peculiarly abundant transpiration. It is conjoined with a peculiar odour, which is well known in Negroes and in the Caribbee Indians.||

* Winterbottom, vol. ii. Hawkesworth, *ibid.*

† Marsden.

‡ P. 312.

|| "Ils ont tous une odeur forte et désagréable. Je ne puis rien indiquer qui put en approcher l'idée. Quand on trouve ailleurs une odeur semblable on l'appelle, aux îles Antilles, une odeur de Caraïbe, ce qui prouve l'embarras, ou l'on est, de la désigner." (Thibault de Chanvalon, cited by Blumenbach. *De l'Unité du Genre Humain*, p. 181.)

The same author observes that the race of dogs found in Egypt has a similarly smooth, glabrous, and unctuous skin, and a transpiration particularly abundant.

Whatever difference subsists between the skin of the negro and that of other tribes of men seems to fall within the degrees of variation which are liable to arise in one species. Many considerable variations might be pointed out in the texture of the integument in several species of animals. Buffon has remarked an instance of this kind in the domestic ass. He observes that the principal variety which takes place in this animal in consequence of domestication, consists in the texture of the skin. The skin becomes softer in the domesticated race, and loses those little tubercles which are dispersed over its surface in the onager. It is of this tuberculated skin of the wild ass that the Levantines make the grained leather termed *chagrin*.*

It is unnecessary to accumulate facts from the "The Peruvian Indians," says Von Humboldt, "who in the middle of the night distinguish the different races by their quick sense of smell, have formed three words to express the odour of the European, the Indian American, and the Negro; they call the first *pezuña*, the second *posco*, and the third *grain*."

Mr. James, in the Narrative of a Journey in North America, already cited, informs us that the peculiar odour diffused by the body of the Indian, seems not to be caused so much by the cutaneous transpiration as by the custom of rubbing the skin with odiferous plants and with bison grease. The same writer observes, that to the acute smell of the Indian, the odour of a white man is disagreeable. (Expedition, &c. vol. ii. p. 6.)

* Buffon, sur la dégénération des animaux.

lower tribes in the creation to illustrate this subject. I shall conclude this section with the description of a very remarkable variety which has appeared in the human species.

The first account of this phænomenon is to be found in the Philosophical Transactions for the year 1731. A boy, aged fourteen years, was brought by Mr. Machin, one of the secretaries, from the neighbourhood of Euston-hall in Suffolk, his native place, and exhibited to the Royal Society. His body was covered by a remarkable kind of integument, which is thus described by Machin.

“His skin, if it might be so called, seemed rather like a dusky coloured thick case, exactly fitting every part of his body, made of a rugged bark or hide, with bristles in some places; which case covering the whole, excepting the face, the palms of the hands, and the soles of the feet, caused an appearance as if those alone were naked and the rest clothed. It did not bleed when cut or scarified, being callous and insensible. It was said he sheds it once every year, about autumn; at which time it usually grows to the thickness of three quarters of an inch, and then is thrust off by a new skin which is coming up underneath.” It was not easy to think of any sort of skin or natural integument that exactly resembled it. Some compared it to the bark of a tree; others thought it looked like seal-skin; others like the skin of an elephant, or the skin about the legs of a rhinoceros; and some took it to be like a great wart, or number

of warts uniting and overspreading the whole body. The bristly parts, which were chiefly about the belly and flanks, looked and rustled like the bristles or quills of a hedgehog shorn off within an inch of the skin.

The second account of this person was communicated to the Royal Society by H. Baker. He was at that time forty years of age, and had been shewn in London, by the name of the porcupine man. He is described as being "a good-looking well shaped man, of a florid countenance, who, when his body and hands are covered, seems nothing different from other people. But except his head and face, the palms of his hands, and bottoms of his feet, his skin is all over covered, in the same manner as in the year 1731, which therefore," continues Mr. Baker, "I shall trouble you with no other description of, than what you find in Mr. Machin's account above mentioned; only begging leave to observe, that this covering seemed to me most nearly to resemble an innumerable company of warts, of a dark brown colour, and a cylindric figure, rising to a like height, and growing as close as possible to one another, but so stiff and elastic, that when the hand is drawn over them they make a rustling noise."

"When I saw this man in the month of September last, they were shedding off in several places, and young ones of a paler brown observed, succeeding in their room, which he told me happens annually in some of the autumn or winter

months, and then he is commonly let blood, to prevent some little sickness which he else is subject to, whilst they are falling off. At other times he is incommoded by them no otherwise than by the fretting out his linen, which he says they do very quickly, and when they come to their full growth, being then in many places near an inch in height, the pressure of the clothes is troublesome."

"He has had the small-pox and been twice salivated, in hopes of getting rid of this disagreeable covering; during which disorders the warting came off, and his skin appeared white and smooth like that of other people; but on his recovery soon became as it was before. His health at other times has been very good during his whole life."

"But the most extraordinary circumstance of this man's story, and indeed the only reason for my giving you this trouble is, that he has had six children, all with the same rugged covering as himself; the first appearance whereof in them as well as in him, came on in about nine weeks after the birth. Only one of them is living, a very pretty boy, eight years of age, whom I saw and examined with his father, and who is exactly in the same condition."

"It appears therefore past all doubt," says Mr. Baker, "that a race of people may be propagated by this man, having such rugged coats or coverings as himself; and if this should ever happen, and the accidental original be forgotten, it is not improbable they might be deemed a different species of mankind."

It seems that a third generation of this singular family is in existence. A description of two individuals, who must be of the third degree from the original patriarch of the stock, has been published by Dr. W. G. Tilesius and by Blumenbach. Mr. Lawrence has given an abstract of these accounts. "Two brothers, John Lambert, aged twenty-two, and Richard, aged fourteen, who must have been grandsons of the original porcupine man, Edward Lambert, were shewn in Germany, and had the cutaneous incrustation already described. Tilesius mentions, that the wife of the elder, at the time he saw him, was in England, pregnant. It is to be hoped that this new progeny will not remain in obscurity, for want of a naturalist to celebrate its fame."

SECTION V.

Of Varieties of Form in the lower tribes of Animals, analogous to the corresponding Diversities above described in Mankind.

In pursuing the analogical method of investigating this subject, we now come to consider what varieties in the structure and figure of parts, and especially in the bony fabric of the body, can be discovered in the lower tribes of animals, which may serve to illustrate the diversities of form in mankind.

It has often been observed by naturalists, that striking varieties of form are to be found in many races of animals, but that they are most numerous

and remarkable in those species which have been domesticated, and have been propagating their kind for many generations under the various unnatural circumstances to which the art of man has subjected them. The dog, which has been the companion of man from the earliest times, and which has followed him into all climates, has been mentioned as an example of the greatest variability of structure. This instance has been contrasted with that of the elephant, which has seldom been found bred in a state of captivity, but is caught afresh from the wilderness,* and exhibits very little deviation. But the examples afforded by the dog kind are liable to an objection, since it is not agreed among naturalists, and it is difficult to ascertain, whether all the races of dogs are descended from one stock. The hog tribe presents a more unexceptionable instance, and this has been fixed upon by Blumenbach as particularly fit to illustrate by a comparative view of the phenomena it presents, the origin of the varieties which occur in mankind. "No naturalist," says this excellent writer, "has carried his scepticism so far, as to doubt the descent of the domestic swine from the wild boar. It is certain that before the discovery of America by the Spaniards, swine were unknown in that quarter of the world, and that they were first carried thither from Europe. Yet, notwithstanding the comparative shortness of the in-

* Vide Pallas. *Spicileg. Zoolog.* Blumenbach. *Beyträge zur Naturgeschichte.* vii.

interval, they have in that country degenerated into breeds, wonderfully different from each other, and from the original stock. These instances of diversity, and those of the hog kind in general, may therefore be taken as clear and safe examples of the variations which may be expected to arise in the descendants of one stock.*

In following this observation, Blumenbach remarks, "that the whole difference between the cranium of the Negro and that of an European is by no means greater than that equally striking difference, which exists between the cranium of the wild boar and that of the domestic swine. Those who have not observed this in the animals themselves, need only to cast their eyes on the figure which Daubenton has given of both."

"I shall pass over," he adds, "the lesser varieties of breed, which may be found among swine, as among men, and only mention that I have been assured by Mr. Solzer, that the peculiarity of having the bone of the leg remarkably long, which in the human kind is observed among the Hindoos, has been remarked with regard to swine in Normandy. They stand very long on their hind legs,"—"their back, therefore, is highest at the rump, forming a kind of inclined plane; and the head

* *Beyträge zur Naturg. ubi supra.* See also a Comparison between the Human Race and that of Swine, by the same author, published in the *Magazin für das neueste aus der Physik*, and translated in the 3rd vol. of the *Philos. Mag.*

proceeds in the same direction, so that the snout is not far from the ground."

"Swine," continues Blumenbach, "in some countries have degenerated into races, which in singularity far exceed every thing that has been found strange in bodily variety among the human race. Swine with solid hoofs were known to the ancients, and large breeds of them are found in Hungary and Sweden. In the like manner the European swine, first carried by the Spaniards in 1509 to the island of Cubagua, at that time celebrated for its pearl-fishery, degenerated into a monstrous race, with toes which were half a span in length."

There are breeds of the solid-hoofed swine in some parts of England. The hoof of the swine is also found divided into five clefts.

Buffon had before remarked the varieties of the hog tribe. "In Guinea," he observes, "this species has acquired very long ears, couched upon the back; in China, a large pendent belly, and very short legs; at Cape Verd and other places, very large tusks curved like the horns of oxen; in domestication, half pendant, and white ears."

The different breeds of Sheep afford varieties equally remarkable. The following account by Pallas of the sheep of the Kirguis is worthy of observation. He says, "On ne trouve nulle part

* Buffon sur la dégénération des animaux. Hist. des Quadrup. tom. vii.

des moutons aussi gross ni aussi difformes que ceux des Kirguis. Ils sont plus élevés qu'un veau naissant, et fort pèsans. Ils ressemblent un peu pour les proportions aux moutons des Indes. Ils ont la tête très bosselée, du grandes oreilles pendantes; la lèvre inférieure dévance beaucoup la supérieure. La plupart ont une ou deux verrues couvertes de poils qui leur pendent au cou. Au lieu de queu, ils ont un gros peloton de graisse rond presque sans laine au dessous." He remarks, that although removed into other countries, these sheep retain their peculiarities.*

If we compare the different breeds of sheep which are found in Africa, in Tartary, in various parts of Europe, and consider them all as the modified offspring of one stock, as they are generally by naturalists supposed to be, we shall have greater instances of deviation than any found in mankind; and this will be more especially the case, if we compare all the breeds of sheep with the wild Argali, which is supposed to be the natural type and original of the race.†

Some great diversities in figure and in the proportion of parts are to be found in the horse and the ox kind. "What a remarkable difference," says Blumenbach, "is there in these respects between the horses of Arabia and Syria, and those of Northern Germany; between the long-legged oxen

* Pallas. Voyages en Sibérie.

† See a description of the Argali, or wild sheep of Siberia, in Pallas's *Spicilegia Zoologica*.

of the Cape of Good Hope, and the short-legged breeds of England!" Blumenbach has observed "that there is less difference in the form of the skull in the most dissimilar of mankind, than between the elongated head of the Neapolitan horse and the skull of the Hungarian breed, which is remarkable for its shortness and the extent of the lower jaw."* In this country the heads of the race-horses differ much in form from those of the draft horses. Wild horses are said to have larger heads in proportion, and foreheads of a round and arched form.†

The Urus, or Aurochs, which has generally been held to be the wild stock of our domestic oxen, has the fossa lachrymalis remarkably deep. Our oxen have no trace of it.‡

* Blumenbach, de l'Unité du Genre Humain.

† Pennant's Hist. of Quadrupeds.

‡ Blumenbach, *ubi supra*. It must not, however, be omitted, that the generally received opinion, which makes the Urus or Aurochs the wild representative of our domestic cattle, has lately been controverted by M. Cuvier. This author has described the fossil skull of an animal of the ox tribe, which he conceives to have been the true prototype of the domesticated breeds, and to have become extinct in its natural condition. It differs considerably, according to Cuvier, from that of the Urus. It appears that the ancients were acquainted with two wild animals of this tribe; viz. the Urus and the Bison, and that one of them has perished. Pliny distinguishes them, and Seneca mentions them both in the following lines:

"Tibi dant variæ pectora tigres,

Tibi villosi terga Bisontes,

Latisque feri cornibus Uri."

Seneca Hippol.

The Goat exhibits varieties of form. There is a breed of goats near Jerusalem of various colours, black, white, and grey; the ears are remarkably long. The goats of Aleppo are of two breeds; one is like the English, the other somewhat larger, with ears often a foot long, and broad in proportion.*

No animals exhibit greater diversity of form than the domestic fowls. "Some of them," says Pallas, "are large, some extremely small; they are tall, dwarfish; have small, or large and double combs; some have tufts of feathers on their heads; some have bare and yellow legs; others have their legs covered with feathers." What is still more remarkable, is that there is a breed without rumps, common in some parts of England, and another with five claws. The fowl of Padua, of which Pallas has published an account, has a peculiarity in the conformation and capacity of the skull, which is, perhaps, a greater deviation from the usual structure than any other species of animal presents.†

I have made no reference to the diversity of figure in the different breeds of Dogs, because it

See Cuvier sur les Os Fossiles de Ruminans. Annales du Muséum d'Hist. Nat. de Paris, tom. xii.

* Dr. Russel, vol. ii. p. 150.

† Pallas. Spicileg. Zoolog. Fascia 4. The upper portion of the skull is dilated into a shell of hemispherical form, full of small holes. The whole cavity of the dilated bone is filled with an unusual abundance of the cerebral substance.

might be disputed whether they are all from one original stock.

The want of horns is a character of some breeds, both of sheep and oxen: the sheep of Crete and Sicily, and the oxen of Abyssinia, present a singular contrast to these breeds, in the number or enormous size of their horns. In Paraguay there are breeds of oxen without horns descended from the common horned race. This circumstance is remarked with surprise by Azzara, who contrasts it with a fact much more extraordinary, if true, that the horses in the same country are sometimes seen with horns.

If we take a collective survey of these diversities in the figure and proportions of parts, distinguishing particular breeds in the several species of animals, we are led to conclude that the original type is stamped upon each kind, with a considerable allowance for the springing up of new varieties in form and organic structure. The deviations from a common model in mankind are less in degree than those which are found in many other species, and they are in kind analogous, as far as such analogy can be expected. On the whole, it appears that the inquiry into the variation of other tribes is, perhaps, as conclusive as analogical reasoning can be, on this question; at any rate, it is favourable to the opinion that all the differences of the human form may be variations from a single primitive type.

SECTION VI.

Of the hereditary Transmission of Varieties.

ALL varieties of structure, which are congenital, or a part of the original constitution impressed upon an individual from his birth, or arising from the development of a natural tendency, are hereditary, or liable with a greater or less degree of certainty, to be transmitted to the offspring. In general the peculiarities of the individual are transmitted to his immediate descendants: in other instances they have been observed to reappear in a subsequent generation, after having failed, through the operation of some circumstances quite inexplicable, to shew themselves in the immediate progeny. This fact has been noticed by Lucretius:

“Fit quoque ut interdum similes existere avorum

Possint, et referant proavorum sæpe figuras;

Propterea quia multa modis primordia multis

Mista suo celant in corpore sæpe parentes,

Quæ patribus patres tradunt à stirpe profecta.

Inde Venus variâ producit sorte figuras,

Majorumque refert voltus, vocesque, comasque.”

I have already mentioned some examples of variety in structure transmitted to the progeny through several generations. Many instances of the same description will be adduced in a future part of this work, when I proceed to consider the causes which have contributed to the formation of particular races of men.

As the complexion depends on minute varieties of structure and the texture of parts, the diversities of colour may in reality be referred to the peculiarities of organization. The phænomena of colour, however, and the modes of its transmission to the offspring, are more distinguishable, and the facts relating to this subject deserve to be considered separately.

The offspring of parents of the same complexion is generally like them, unless when a new connate variety springs up in the race, a phænomenon which it is not our present object to investigate. The circumstances which give rise to such appearances will be considered hereafter.

But when the parents are of different complexions the offspring is in some cases of intermediate colour; in other instances it nearly resembles one parent, and seems to derive no peculiarity from the other. It is difficult to say on what circumstances these variations in the phænomena depend, but I shall endeavour to lay down some general observations respecting them.

1. When the parents are of two different varieties, as one of the melanic variety, and the other of the xanthous or albino, the offspring often follows one parent chiefly or entirely.

This appears to be always the case in respect to the offspring of an albino and a melanic parent. It seems that there are families of Negroes in which there is an hereditary tendency to produce white children, but in such races no intermixed

colour is apt to make its appearance. An instance of this description has been related by Dr. Parsons in the 55th volume of the Philosophical Transactions. As the facts of this case are very remarkable and well authenticated, I shall copy the account which was communicated to the writer by a respectable lady who had resided in Virginia.

“About nineteen years ago, in a small plantation near to that of this family, which belonged to a widow, two of her slaves being black, were married, and the woman brought forth a white girl, which this lady saw very often, and, as the circumstances of the case were very particular, I shall make mention of them here:—When the poor woman was told the child was like the children of white people, she was in great dread of her husband, declaring at the same time, that she never had any thing to do with a white man in her life, and therefore begged that they would keep the place dark that he might not see it. When he came to ask her how she did, he wanted to see the child, and wondered why the room was shut up, as it was not usual. The woman’s fears increased when he had it brought into the light; but while he looked at it he seemed highly pleased, returned the child, and behaved with extraordinary tenderness. She imagined he dissembled his resentment, till she should be able to go about, and that then he would leave her; but in a few days he said to her, ‘You are afraid of me, and therefore keep

the room dark, because my child is white, but I love it the better for that; for my own father was a white man, though my grandfather and grandmother were both as black as you and myself; and although we came from a place where no white people were ever seen, yet there was always a white child in every family that was related to us.' The woman did well, and the child was shewn about as a curiosity; and was, at about the age of fifteen, sold to Admiral Ward, and brought to London in order to be shewn to the Royal Society."

Mr. Jefferson has mentioned seven instances of the appearance of the albino variety which fell under his knowledge: in several of these, the individuals who had this peculiarity had children. Three female albinos were the offspring of the same black parents; they had two other full sisters, who were black. Two of these albino women bore black children to black men. The fourth example mentioned by Mr. Jefferson was that of a woman, whose parents came from Guinea; they had three other children who were black. This woman was an albino, and bore an albino child to a black man. The sixth example was a white negress, who bore a black daughter to a black man. The seventh instance was that of a male, who is not said to have had any children.*

Among the instances of white negroes, mentioned by Dr. Winterbottom, there are some in which this character was transmitted. One of them was a

young albino man, whose father had been a white negro, and his mother a black woman. From these parents were born five black and two white children. In another case a man and a woman, both albinos, were born of black parents, who had several other children that were black: both of these albinos were married to blacks. The man had no children; the woman had black children.*

Phænomena of this description are not confined to the result of marriages between albinos and black persons; they take place also when other whites are married to blacks. The following instance, related by Dr. Parsons, affords a proof of this assertion:

“A black man married a white woman in York several years ago; of which,” says Dr. Parsons, “I had an account from an eye-witness. She soon proved with child, and in due time brought forth one entirely black, and in every particular of colour and features resembling the father, without the least participation from the mother.”

A similar observation may be made in other instances; when Europeans of the xanthous variety have been married to persons descended from the darker races of the melanic variety. I have seen a family of several children, the offspring of an European of sanguine complexion, and a very dark woman of colour, born in the West Indies. Some of the children are as dark

* Winterbottom's Account of the Negroes of Sierra Leone, vol. ii. p. 170.

as the mother, others very fair, and of sanguine complexion, with light eyes.

A gentleman with whom I lately conversed, assured me that he knew a family of mixed breed from the West Indies, in which one individual, a young man, was of very dark colour, and had African features: his sister had English features, a fair complexion, and red hair.

Mr. White mentions the case of a negress who had twins by an Englishman; one was perfectly black, with short, woolly, curled hair; the other was white with long hair.

Instances have occurred in which the offspring of parents of different colours have had different parts of the body of different complexions. The following fact is related by Dr. Parsons in the Philosophical Transactions.

A black man, servant to a gentleman, who lived in the neighbourhood of Gray's Inn, married a white woman who lived in the same family; and when she proved with child took a lodging for her in Gray's Inn-lane. When she was at her full time the master had business out of town, and took his man with him, and did not return till ten or twelve days after this woman was delivered of a girl, which was as fair a child to look at as any born of white parents, and her features exactly like the mother. The black at his return was very much disturbed at the appearance of the child, and swore that it was not his; but the nurse who attended the lying-in woman soon satis-

fied him, for she undressed the infant, and shewed him the right buttock and thigh, which were as black as the father, and reconciled him immediately to both mother and child. I was informed of the fact, and went to the place, where I examined the child, and found it true. This was in the spring of the year, 1747, as my notes specify.

Some very curious instances of a similar description have been cited by Mr. White from the *Zoological Magazine*.*

2. In other instances the offspring between a Negro and an European, is what is properly termed a Mulatto; that is, a person of intermediate complexion and general character. This is perhaps more especially the result of marriages between Negroes and Europeans who are not of the fair or xanthous complexion, which is most opposite to that of the Negro, but of the melanic or

* White on the *Regular Gradation*, &c. p. 123.

They are as follows:—1. 1759, a girl was born in Somersetshire, with the hair on her head of two remarkably distinct colours. After she was grown up a little, the hair on the right side appeared of a jet black, resembling the father's; while that on the left side was of a carrotty red, resembling the mother's; each occupying one-half of the head, &c. 2. A few years ago a person kept a public house in Tooley-street, Southwark, the whole right side of whose body was white, and the left side black. His father was white, and his mother black. 3. A Mr. John Clark, of Prescott-street, Goodman's Fields, is said to have had half of his body white, from his navel upwards, and the other half black. His father was a native of Africa and his mother an Englishwoman.

black-haired variety, but it is also a common fact in all intermarriages of Europeans with Africans.

SECTION VII.

Of the different kinds of Hair which distinguish particular Races of Men.

THE short crisp hair of the Negro, Hottentot, and some other races of men, is so different from the long, glossy, and flowing hair of the Esquimaux and other native Americans, and even from the hair of most Europeans, that there are perhaps no diversities to be found among mankind, which afford a more probable argument than this for constituting different species.

It is common to term the crisp hair on the head of the African "*wool*," on account of the resemblance it seems to bear to the wool of sheep. Whether this denomination be correct, must depend on the distinction between hair and wool, which it is desirable, if possible, to ascertain.

We are assured by an intelligent writer on the nature and growth of wool, that the peculiarity which has obtained the name of wool for some kinds of hair, is the smallness, softness, and pliability of the fibre. These qualities render it capable of being spun and woven into a cloth, which will felt or mill into one uniform texture, and in which the process of fulling will cover the surface of the threads with a pile. The author adds, that "when the hair of any animal is too hard and

elastic to admit of the same effect being produced by a similar process, we cease to call it wool.*

Another writer on the same subject remarks the two following distinctions between hair and wool:

1. Wool falls off altogether in a mass, and leaves the animal bare, while hairs fall off singly, and from time to time. 2. The growing part of the fibre of wool varies in thickness according to the season, being thicker in proportion to the warmth of the atmosphere, and smallest of all in winter. On the contrary, the filament of hair is generally of uniform thickness, or tapering a little towards the point.

We may notice that this latter difference, if it be a constant one, is not the essential distinction; and as for the former, the falling off of the fleece in a mass, seems to be the result of its being previously interwoven, and in some degree felted together, so that it is impossible for any part to fall off until the filaments are nearly all detached from the skin.† There is no reason to suppose that they all become detached simultaneously, any more than hairs.

* See Bakewell on Wool, p. 9. He further remarks, "that some wool has a much nearer resemblance to hair, in the hardness and elasticity of its fibre than other wool equally fine. Cloth made of such wool is hard and harsh to the touch, loose in its texture, and the surface of the thread is bare." Ibid. It would seem from this, that the main distinction between wool and hair must be in the nature and surface of the filament, which renders it capable or not, of felting.

† See Bakewell on Wool, *ibid.*

After all that has been said on the difference between hair and wool, it appears that there is no absolute distinction between them. When hair becomes very fine and crisp, it is termed wool: the characters of these substances pass insensibly into each other. Therefore if the hair of the African be really such a substance as is properly to be termed wool, it is not by this denomination characterised as something altogether different in kind from the hair of other men.

There is however a strongly marked peculiarity in the hair of the Negro. The filaments are evidently finer and shorter. They have a peculiar spiral twist, and apparently a roughness of surface which occasions them to become matted, and in some measure felted together into a mass. This is certainly an approximation to the character of wool. Dr. J. R. Forster has observed, that the filaments of the hair of the Negro issue from smaller bulbs than those of European hair.

We may observe in the way, that every intermediate gradation that can be imagined has been found in a variety of instances, between the crisp hair of the African races, and the lank hair of other nations. In Africa the Hottentots are said to have hair still more crisp, or like wool, than the Negroes;* the tribes called Kaffers have hair like that of the Negroes; others have it longer. There are other nations in Africa who are black, and in

* Sparrmann.

other respects resemble negroes, but who have curled hair, not crisp. The Papuas have crisp hair, but, unlike that of the Africans, it grows to such length that it admits of being bushed out into a periwig, three feet in diameter. The hair of the natives of Van Diemen's Land is as crisp as that of the Africans, though the New Hollanders have straight hair, and in the New Hebrides it is of intermediate character, differing considerably in the natives of the same island.

I have seen hair on the heads of some Europeans so remarkably similar to that of the Negro, that it was scarcely possible to distinguish one from the other.*

In other departments of nature we meet with varieties in the covering of animals, very similar to this variety in mankind.

The sheep affords an instance of this class, which is the most generally known, and the most clearly ascertained. Some sheep bear wool, others hair, and this without any difference of species, or even of race. In some respects this variation is parallel to that of human hair, in others not strictly so.

It is well known that if a flock of sheep is neg-

* Particularly of a boy born near Somerton, in Somersetshire, whose parents are both English rustics, with no peculiarity of appearance; the boy had hair which appeared so similar to that of an African, that on a minute comparison I could discern no other difference than that of colour, and perhaps a slight diversity in the surface; the hair of the Somersetshire boy being somewhat more glossy than that of the Negro.

lected, and no attention paid to their breed; that is, to the selecting of rams and ewes of the finest fleeces for propagation; the fine wool gives place to a much coarser growth of the same kind, intermixed with kemps or strong hairs. The breed seems gradually to degenerate towards the characters of the Argali, or wild sheep of Siberia, which is looked upon by naturalists as the original stock whence all the varieties of domesticated sheep are derived. The Argali, according to Pallas, is covered with hair, which in summer is close like that of the deer, but in winter becomes rough and curled, resembling coarser hair intermixed with wool.* The breeds of sheep kept by the Kirguis-Kaisacs are very similar with respect to their fleeces to the Argali. They are covered with strong hair, intermixed with coarse wool. We are assured by Pallas, that into whatever countries the breed may be removed, its character continues to be the same.†

It has often been observed that the sheep now existing in the West India islands are covered with coarse hair. They are descended from the woolly sheep of Europe. The change has generally been attributed to the heat of the climate.

Dr. Anderson has called this opinion in question, and conjectures that a different race of sheep may have been propagated in the West India islands. But we have no reason to believe that

* Pallas. *Spicileg. Zoolog.*

† Pallas. *Voy. en Sibérie*, tom. i.

any other breed was ever introduced into the West Indies, than those of England, and perhaps of Spain. No sheep existed in the islands at the time of their discovery. The different characters of the West India breed must therefore be the effect of the circumstances under which they have existed and propagated their kind. Among these I am inclined to agree with Mr. Bakewell, in believing, that the most important is, that they have been neglected by man, particularly with respect to their breed. The heat of the sun, variation of temperature, will indeed produce a considerable change in the growth of wool on one individual animal; and if those same animals, which are hairy in the West Indies, were brought to England, and properly fed and treated, their appearance would soon be altered to a certain degree. But whatever effect might arise from such an alteration of external circumstances, a great difference would probably still remain between West Indian sheep and the native sheep of England; and this difference, now inherent in the stock, owes its origin to neglect in the propagation of the breed, and not to the influence of climate.

Mr. Bakewell has described a sheep brought from the Mississippi. In figure it exactly resembled our Wiltshire sheep, and was probably the remote offspring of that race. "It was a fine healthy animal, but it produced no fleece. It was thinly covered with short coarse hairs, or kemps,

under which there was a slight appearance of a fine down or wool." "This," adds the author, "might probably have been increased by proper management."*

On the whole it appears that a considerable change is produced on the fleece of the sheep by the influence of climate. This kind of variation has no analogy to the diversity between the hair of the Negro and European. But independently of the effect of climate, it seems that there is a great variety in the fleeces of sheep, depending on the breed, and the different care which has been bestowed on its propagation; and this difference, since it constitutes a character which affects the whole progeny, is analogous to the diversity between the different kinds of hair in the human race.

Some other animals besides the sheep are well known to vary in their natural covering in no less a degree.

Goats are both hairy and woolly. Some goats are covered with rough, others with smooth hair. Other races of goats, without any difference, that is supposed to constitute a distinction of species, produce fine wool: as those of Cashmire, from whose fleece the shawls are fabricated. The goats

* The same author has given an account of two English ewes, which were transported to St. Domingo. "These animals, soon after their arrival on the island, became languid and sickly, lost their wool, and in twelve months a harsh, sparing crop of hair was observed on them." Bakewell, p. 154.

of Lycia are mentioned as producing wool, in the time of Ælian.

The goats of Angora, in Anatolia, produce a fine silky hair of snowy whiteness, and great length. It is remarkable that the cats and rabbits of the same district resemble the goats in the colour and texture of their hair, a circumstance which seems, as Blumenbach has remarked, to imply some peculiar influence of climate on the covering of these animals.

Some breeds of dogs have a covering of close harsh wool, others of softer wool. It can hardly be imagined that these animals are of distinct species from those breeds of dogs which are covered with hair, or that they had different prototypes among the races of wild animals. I believe no animals of the dog kind are found to be woolly in the state of nature. If this be the fact, we have in the dog species fully as great a variety in the texture of hair, as there is among the races of men.

Blumenbach has observed, that there is a difference in the hair of swine, which he thinks analogous to that of the human kind. He remarks that "fair hair is soft, and of a silky nature; black hair coarser, and among several tribes of men, woolly. In like manner among the white swine in Normandy, the hair on the whole body is longer and softer than that of other swine, and even the bristles on the back are very little different, but lie flat, and are only longer than the hairs on other parts of the body. They cannot therefore

be employed by the brush-makers. The difference between the hair of the wild boar and of the domestic swine, particularly in regard to the softer hair between the strong bristles, is, as it is well known, much greater.*

It has been thought by some, that the hair of the American races differ from that of Europeans in the form of the filament, which has been said to be more flattened or oval in its section. But I believe there is no ground for this opinion.

SECTION VIII.

Of Diversity of Stature.

THERE is no variety of stature in the different races of men which can afford any ground for suspecting them to be of distinct origin or species. We shall, therefore, pass over this subject at present with a very brief notice. The particular varieties of stature which are known, as they characterize different nations, will be adverted to when we proceed to the physical description of each race.

There are no varieties of stature in different nations which are so considerable as those which frequently occur in the same family.

Perhaps the tallest race of men existing are the Patagonians. They are usually from six to seven feet high. Pigafetta, who accompanied Magalhaens, in the first voyage performed round the

* Blumenbach, *ubi supra*. Comparison between the human race and swine.

world, gives their height at eight Spanish feet, that is seven feet four inches in English measure. Commodore Byron, who saw and conversed with many companies of these people, says, that few individuals were much short of seven feet high. An Englishman of six feet two inches appeared among them as a pigmy among giants. They were large and muscular in proportion. It must be observed, that Byron did not measure them.*

Captain Wallis, who landed afterwards on the same coast, measured several of the Patagonians. He says, that he saw one man six feet seven inches high, several of six feet five or six inches; but that the stature of the greater part, was from five feet ten to six feet.†

The stature of the Patagonians was measured with great accuracy by the Spanish officers of the expedition to the straits of Magalhaens, in 1785 and 1786. They found the common height to be from six and a half to seven feet, and the tallest was seven feet one inch and a quarter high.‡

America not only produces the tallest, but also some of the most diminutive specimens of the human kind. The natives of Tierra-del-Fuego are described by Forster as a set of miserable, destitute, and puny savages. The Esquimaux, in the northern tract of the New World, are a still more diminutive people. This race was first seen by

* Hawkesworth's Voyages.

† Ibid.

‡ Voyage to the Strait, cited by Mr. Lawrence, p. 440.

Europeans at the time when the Norwegians, who sailed from Old Greenland under Lief, in 1001, discovered Wineland in Canada, or Newfoundland. The natives of this country were described by the Norwegians as pigmies, only two cubits high, and were termed *skrællings*, sprigs, or dwarfs. Modern and authentic accounts represent the stature of the race as generally lower than five feet.*

Africa produces some very small races. The Bosjesmen are perhaps the most deformed of mankind. Two individuals of this nation, seen by Professor Lichtenstein, were scarcely four feet high. The story of the Quimos, or Kimos, a nation of pigmies, said to inhabit some mountainous tracts, in the interior of Madagascar, is now generally discredited. According to Commerson, a female of this nation, who was purchased by the French governor at Fort Dauphin, was about three feet and a half high, and had long arms reaching to her knees. We shall enter further into the accounts of these nations in a future part of this work. At present they are mentioned only that they may be included under the observation already suggested, that every variety of stature which has been found to occur as the general character of a whole race, is frequently surpassed by individual examples among the inhabitants of the same country. Many natives of Europe from eight to nine feet high, have

* Crantz's History of Greenland.

been described and exhibited in their time as objects of curiosity, and historical testimonies remain of giants somewhat exceeding this enormous stature. These persons were taller than the Patagonians. On the other hand, dwarfs are not infrequent, still smaller than the reported stature of the Kimos.*

Both dwarfs and giants have offspring of similar stature to their own; so that a race of men might easily arise of extraordinary smallness or gigantic size. Of the propagation of giants, we have an experimental proof in a fact related by Dr. J. R. Forster. It is well known, that the king of Prussia had a corps of gigantic guards, consisting of the tallest men who could be drawn together from all quarters. A regiment of these huge men was stationed during fifty years at Potsdam. "A great number of the present inhabitants of that place," says Forster, "are of a very high stature, which is more especially striking in the numerous gigantic figures of women. This certainly is owing to the connexions and intermarriages of the tall men with the females of that town."

A dwarfish stature is in like manner hereditary. A well-proportioned dwarf of Nuremberg, who measured nearly three feet high, has been mentioned by several writers. Her parents, brothers, and sisters, were dwarfs.†

* Count Borwluski measured 28 Paris inches; he had a brother of 34 inches, and a sister of 21. Lawrence, p. 434.

† Lawrence, *ubi supra*, p. 424.

The different breeds of domestic animals vary from each other in size much more than individuals the most different in stature among mankind. The small Welsh cattle, compared with the large flocks of the southern counties in England, or the Shetland ponies with the tall-backed mares of Flanders; the Bantam breed with the large English fowls, are well known examples. More striking instances are mentioned by naturalists. In the isle of Celebes, a race of buffaloes is said to exist, which is of the size of a common sheep, and Pennant has described a variety of the horse in Ceylon, not more than thirty inches in height.*

SECTION IX.

Recapitulation and Conclusion of this Argument.

I have thus taken a brief but sufficiently extensive survey of the principal differences in complexion, in figure, and proportion, in the features and form of the head and countenance, in the texture of the skin and other parts, and in the growth and stature, which are peculiar to certain races of men, and I have compared these varieties with the phænomena which other tribes of warm-blooded animals display. How far they are analogous to these phænomena the reader is now able to judge; and I shall dismiss the subject with a few brief remarks.

The variety of colour is generally thought to be

* Pennant's History of Quadrupeds.

of less importance as a distinction of races, and to afford less difficulty of explanation, than the variations of structure. But perhaps the varieties of mankind are less nearly analogous to those of other species in this respect than in some others. The three principal varieties of colour referring to the hair are traced in many other tribes. In most of the domesticated races at least there is a white variety, and a red, yellow, or brown, as well as a black-haired variety, which correspond with the albino, xanthous, and melanic races of men; but the variety in the hue of the skin among the black haired races, is a phænomenon to which we have, as far as I know, no precisely exact parallel in the brute creation. The varieties of form and structure in mankind, when compared with those which have been noticed in other species, appear to be very nearly alike with respect to their nature; and they are not so considerable in the degree of their deviation from a common character. As far as we can trust to an inference drawn from analogy, this comparison leads us to the opinion, that the diversities of the human form are deviations from one primitive type. It renders at least this conclusion more probable than the opposite one. The same observation appears to be equally applicable to all other examples of variety, as to those in the texture of the skin and the hair, in the stature, and in relation of parts.

It is evident that the probable inference derived from this comparison of parallel, or analogous phæ-

nomena, will be very much confirmed, if it shall appear on inquiry, that diversities such as those which we have surveyed do in reality take place in particular races of men. Even if these variations are not so great in degree, still if they are analogous in kind, they will tend greatly to confirm the foregoing argument. Some instances of this description have been already alluded to; others more complete and conclusive will be found in the succeeding pages.

It is evident that the probable inference derived from this comparison of parallel, or analogous phenomena, and in relation of parts, the stature, and in relation of parts, those in the texture of the skin and the hair, is applicable to all other examples of variety, as to the same observation appears to be equally applicable. The same observation more probable than the opposite one. I am one primitive type. It renders at least this the diversities of the human form are deviations, this comparison leads us to the opinion, that as we can trust to an inference drawn from analogy, this comparison leads us to the opinion, that their deviation from a common character. As far as they are not so considerable in the degree of to be very nearly alike with respect to their nature; which have been noticed in other species, appear structure in mankind, when compared with those in the brute creation. The varieties of form and frame, as far as I know, no precisely exact parallel black haired races, is a phenomenon to which we find the variety in the hue of the skin among the different races of men; the African, the Chinese, and the European, as a black-haired variety.

BOOK III.

APPLICATION OF THE FOURTH METHOD OF INQUIRY—
SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR RACES. PART I. OF THE AFRICAN RACES.

CHAPTER I.

Introduction—Method to be pursued in this and the following Books.

IN the following chapters of this work I shall endeavour to trace the history of particular races of men, and observe the most remarkable phenomena which occur in the description of their physical characters. In this survey I hope to discover, at least in a certain extent, how far the peculiar traits of different nations are constant and permanent; and in what degree, and under what circumstances, they are liable to deviate from the original, or the prevalent character of each race.

I regret that in this part of the inquiry which I have undertaken, I cannot adopt the method of some well known writers, who have divided the human species into a few principal families. I allude principally to the system of Blumenbach, who has distributed all mankind into five great nations, distinguished from each other by differences in the form of their skulls. This attempt appears to me,

in the present state of our knowledge, to proceed upon hypothetical grounds, and even to take for granted some positions which are irreconcilable with facts, or at least with highly probable inferences from facts. It is by no means evident that all those nations who resemble each other in the shape of their skulls, or in any other peculiarity, are of one race, or more nearly allied by kindred to each other than to tribes who differ from them in the same particulars. The Negroes of Guinea, for example, bear a very striking resemblance to some Papua tribes in the Indian ocean; and if the human species is to be divided into classes, according to their varieties of form and colour, would come into the same department; yet I think we are not authorized by this resemblance to assume that these tribes of men, situated as they are in regions so distant, are of one particular race. It might rather be argued from the circumstance of their occupying countries of corresponding climate and temperature, that similar external causes have produced in the inhabitants of distant regions a similar structure and complexion. But whatever the nature and causes of those diversities may be, which spring up in the offspring of one original stock, it seems probable that the same, or analogous varieties, may originate in many instances; and may appear separately in different countries. Hence the hypothesis of a limited number of particular races or principal nations, including all those tribes who have a certain conformation, must be given up;

and, if we divide the whole family of mankind into several departments, with reference to the shape of their skulls, or any other particular trait of organization, it must be only with a view to facilitate comparisons, and must be done independently of any design to ascribe a common origin, or a near relation of kindred to the tribes included in each class.

We shall divide nations as nearly as possible according to their affinity; when this affinity can be inferred from historical arguments, or proofs, such as the resemblance of languages, and common traditions. But where such a principle of arrangement is defective, it will be necessary to comprise under one head, several nations, with respect to which a common origin is only probable from the circumstances of local vicinity and general resemblance. Thus the different tribes of black and woolly-haired people in Africa may be included in the same groupe, though they differ from each other in language. The same observation may be applied to the native races of America. In these instances, proximity of situation, joined to a resemblance in person and manners, affords reason to believe that the respective nations are allied in descent, though there is no positive proof of the fact; and it must therefore be considered as only probable.

A second, but not an important object, which we must bear in mind in the following chapters, is to collect facts which may throw light on the origin

of varieties in physical structure, and shew what causes have the principal share in producing them, or at least point out under what circumstances they chiefly arise. As we proceed in the description of particular nations we shall briefly notice such phænomena as present themselves, and appear likely to elucidate this inquiry. But these facts will be referred to more expressly for the purpose above-mentioned, and set in their proper relation, in a future division of this work, in which an attempt will be made to collect the inferences that result from them, and establish some general conclusions.

Our present objects then may be stated briefly to be the following:—first, to examine the physical characters of the people of different countries, and to trace the history and connexions of particular races, in order to note down the most remarkable instances of deviation which have occurred in each race. Secondly, by observing the circumstances under which such phænomena have arisen, to acquire data for a further investigation of the causes which give origin to physical varieties.

I proceed to survey in the first place the history of the native races of Africa. It is to be observed that the fact that the African is a descendant of the Caucasian is not a positive proof of the fact; and it must therefore be considered as only probable.

A second, but not an important object, which we must bear in mind in the following chapters, is to collect facts which may throw light on the origin

CHAPTER II.

General Remarks on the Native Races of Africa—Remains of the Libyan Race.

SECTION I.

Distribution of the African Nations.

THE native races of Africa may be divided into three classes; the first consisting of tribes who, in their physical characters, resemble the people of southern Europe; the second, of red, or copper-coloured nations; and the third, of woolly-haired races, generally black or tawny. In each of these departments there are deviations from the general character. Some tribes, included in the first, have a dark complexion approaching to black; the red, or copper hue of the second class, also passes into a very deep shade; while among the woolly-haired races, there are some whose colour is comparatively light.

The first of these departments consists chiefly of nations inhabiting, in scattered tribes, the northern region of Africa, who appear to be connected with each other in descent, and to be the remains of the ancient Libyans. The second class includes a variety of red, or copper-coloured tribes, in the eastern parts, as the Nubæ, or Berberins, the Bejas and their descendants the Ababdé and Bisharein,

and some of the native tribes of Abyssinia ; also, in the western regions of Africa, the Foulahs, or the Poules, in the high tracts where the rivers of Guinea take their rise, as well as the Felatahs, who, issuing from the same quarter, have overrun the central countries of Soudan. The red nations do not appear to constitute one particular race, but are unconnected with, and often situated at remote distances from each other. The third division comprises all the woolly-haired tribes ; the Negroes of Guinea and of the interior, the Kaffers, and the Hottentots.

SECTION II.

Remains of the Ancient Libyan Race.

THE northern region of Africa, in remote times, and before the arrival of Sidonian colonies, appears to have been inhabited by the various tribes of one extended race, by the Romans termed Afri, and by the Greeks, Libyes. To this stock belonged the Mauri, the Numidæ, the Getuli, and other nations, who were partially subdued by the arms of Carthage, and afterwards of Rome. The Phœnician language seems never to have been adopted by the native Libyans ; * the Roman, and, in later times, the Arabian conquerors spread their idioms and manners among the inhabitants of towns and of the coast, but in the interior and mountainous tracts, there are still tribes, whose dialects, entirely distinct from the Punic, the

* See Note A. on the Libyan language and its branches.

Latin, and the Arabic, and yet remarkably similar to each other, afford reason for believing that the ancient speech, and the aboriginal race of northern Africa, have survived all the revolutions which that country has undergone.

In the northern parts of the chain of Atlas are the abodes of the Berebbers, or Berbers, tribes of hardy peasants, who live in huts, or in caverns, among the hills, and support themselves chiefly by pasture and tillage.*

The Shilhas inhabit the southern branches of Atlas, living often in villages, or towns. Their language, which they term *Amazigh*, differs from that of the Berbers, but appears to be a cognate dialect, and the people are a branch of the same stock.†

The Kabyles, who appear to be intimately connected with the Berbers, inhabit the higher parts of the Algerine and Tunisian territories, living in *dashkras*, or mountain villages, composed of huts, which resemble the *magalia* of the old Numidians. They term their language *Showiah*. The Kabyles, as we learn from Dr. Shaw, are in general of a swarthy colour, with dark hair, but those who inhabit the mountains of Auress, though they speak the same idiom, “are of a fair and ruddy complexion, and their hair is of a deep yellow.”‡

* Lemprière’s Tour to Morocco: also Addison’s and Windus’s Travels, and Jackson’s Account of Morocco, p. 135.

† Chenier, Rech. sur les Arabes. Vater in Mithridat. iii. p. 43.

‡ Dr. Shaw’s Travels in Barbary, c. vii.

The tribes above-mentioned are inhabitants of mountainous tracts, where they have preserved their language from remote ages, perhaps even from that time when the chain of Atlas, surrounded by waters which covered the Zahara, formed a lofty island, and was fancied by early navigators to contain the pillars of heaven. The Lybians were, perhaps, an insular race; by them several of the Mediterranean islands are said to have been first peopled,* and from the same stock we know that the Canary islands derived their inhabitants, the celebrated Guanches, who now exist only in their curiously desiccated mummies. But at present the most numerous tribes, sprung from the Libyan race, are scattered through the African desert.

The inhabitants of Siwah and Augila are found to speak a dialect which nearly resembles that of the Shilhas, of Mount Atlas, and thus the extension of one idiom is proved, through the whole northern region of Africa, from the Western Ocean to the confines of Egypt.†

Two great nations of the desert were discovered by Hornemann, the Tuaric and the Tibboo. The idiom of the Tuaric is the same with that of Siwah. The Tibboo are a distinct nation, always at enmity with the Tuaric. They speak a different language, which, however, has some coincidences, indicative perhaps of a remote affinity with that of the Tuaric.

The whole of the Tuaric speak one language,

* See below, book v. chap. vi. sect. iii.

† See Observations on the Language of Siwah by W. Mars-

though divided into a number of tribes, or nations. The chief of these tribes are the Kolluvians in the south, who conquered Agades; the Tagama, in the neighbourhood of Soudan and Tombuctoo, who are Pagans; and the Hagara and Matkara. There is also a tract of country bordering on Soudan, called *Tuat*, inhabited by the Tuaric. They are a wandering people, and are everywhere engaged in committing depredations and carrying off slaves from the negro countries.

The Tibboo* are divided into six tribes, who occupy the country east of Fezzan, and between Fezzan and Bornou. Their affinity to the Tuaric is not altogether certain; but it appears probable, from some coincidences in their language,† and from the general similarity of their manners.

SECTION III.

Physical Characters of these Tribes.

THE various tribes of the Berbers and Tuarics, though of one nation, display great diversities in den, Esq., F. R. S., appended to Hornemann's Travels in Africa. See also observations on this race in the 3rd volume of Mithridates.

The tribes in the interior countries behind Tunis and Algiers, term their language Zhowiah, specimens of which were first collected by Dr. Shaw. The dialect of the Tuaric is termed by them Ertana; as we learn from Capt. Lyon.

* On the tribes and abodes of the Tibboo, see Major Rennell's Geogr. Illustrations of Hornemann, p. 175, &c.

† There are several coincidences in the small vocabularies collected of Tibboo and Tuaric words.

their complexion. They are in general a fine handsome race of people, with straight hair, and European features. The Tuarics of the desert near Fezzan are as white as Europeans, in those parts of their bodies which are covered, but in the parts which are exposed, of a dark brown. The Kolluvians are of different colours; many of them are black, but their features are not like those of Negroes. The Hagara and Matkara are yellowish, like the Arabs: near Soudan there are tribes *entirely black*. The Tagama, however, near Tombuctoo, are white.* There is another tribe also near Bornou, who are as white as the Moors on the Northern Coast.

The Tuaric tribes in the deserts between Tripoli and Fezzan, are thus described by Captain Lyon:—

“ They are the finest race of people I ever saw: tall, straight, and handsome, with a certain air of independence and pride, which is very imposing. They are generally *white*, that is to say, comparatively so; the dark brown of their complexions only being occasioned by the heat of the climate. Their arms, or bodies, (where constantly covered,) are as white as those of many Europeans. Their costume is very remarkable, and they cover their faces as high as the eyes, in the manner of women on the sea-coast.†

* See Hornemann, p. 109.

† Capt. Lyon's Travels in Africa, p. 109.

The same intelligent author has given us the following account of the Tibboo :—

“The Tibboo females are light and elegant in form; and their graceful costume, quite different from that of the Fezzaners, is well put on. They have aquiline noses, fine teeth, and lips formed like those of Europeans: their eyes are expressive, and their colour is of *the brightest black*; there is something in their walk and erect manner of carrying themselves, which is very striking. Their feet and ankles are delicately formed, and are not loaded with a mass of brass or iron, but have merely a light anklet of polished silver or copper, sufficient to shew their *jetty* skin to more advantage; they also wear red slippers.” “Their hair is plaited on each side in such a manner as to hang down on the cheeks like a fan, or rather in the form of a large dog’s ear.” “The Tibboo women, do not, like the Arabs, cover their faces; they retain their youthful appearance longer than the latter.”*

“The Tibboo of Bergoo seem to approach the Negroes in their physical characters. They conceal themselves from the Arab hunters by kneeling on the ground, which is of the same colour as their skins, being black basalt.” They are, however, says Capt. Lyon, “of lighter complexion than other Negroes, and are handsomer people. The

* Capt. Lyon’s Travels, p. 224—227.

females braid their hair, which is *not very woolly*, in long plaits." Hornemann described the Tibboo as "not quite black." He adds, that "their growth is slender; their limbs are well turned; their walk is light and swift; their eyes are quick; their lips thick; their nose is not turned up, and not large; their hair is less curled than that of the Negroes." They are a very shrewd and intelligent, but treacherous people.

Nothing has been discovered which leads to any satisfactory information respecting the affinities and ancient history of the Berber race. They appear to be quite distinct from the Barábras or Berberins of the upper Nile, with whom they were formerly confounded. Professor Vater has compared some vocabularies, and the grammatical forms of the Berber language, with those belonging to other idioms in northern Africa, and in Asia. It appears that there are some marks of connexion between it and the Semitic dialects, which Vater is disposed to ascribe to the connexion of ancient Punic and other Phœnician colonists with the people of Mauritania; and partly to a later intercourse with the Moggrebyn Arabs. According to Vater, it has greater coincidences with the Amaaric, particularly in some forms of the verb substantive.*

* The language of the Berbers has been shewn to have a considerable affinity with that of the Guanches, or old inhabitants of the Canary Islands. On this subject I must refer the

reader to the third volume of the Mithridates; and to the remarks in Hornemann's Travels. Blumenbach has described the mummy of a Guanche from Teneriffe, in which he has found a remarkable resemblance in the form of the face, to the characters of the ancient Egyptians. The style of ornament also resembles that of Egyptian mummies. In other Guanche mummies, it appears that the shape of the skull agrees with the European. See Mithridates, theil iii. s. 57 et seq.; also Mr. Lawrence's Lectures, p. 348; and Blumenbach's Decad. Cranior., Dec. v.

Having surveyed the wandering tribes scattered through the great desert, who were perhaps once confined to the heights and valleys of Mount Atlas, we proceed to the countries which lie southward of the Sahara, and in the first place to Western Negroland, or Guinea. In this part of Africa, though in few instances occur in which particular nations are extensively spread, we find in general that the whole country is divided between a great number of small and distinct tribes, who have no connexion with each other that can be discovered by resemblance of languages or by any other traces. On passing over a river or a ridge of mountains, the traveller finds the race of men completely changed, as far as the race is to be distinguished by customs and peculiar language. There remains in some places a tradition of great empires which have been dismembered, but they are so completely disintegrated that the petty tribes within their pretended limits bear not all vestiges of any connexion with each other.

CHAPTER III.

Nations of Western Negroland, or Guinea.

SECTION I.

General Observations.

HAVING surveyed the wandering tribes scattered through the great desert, who were perhaps once confined to the heights and valleys of Mount Atlas, we proceed to the countries which lie southward of the Zahara, and in the first place, to Western Negroland, or Guinea.

In this part of Africa, though a few instances occur in which particular nations are extensively spread, we find in general that the whole country is divided between a great number of small and distinct tribes, who have no connexion with each other that can be discovered by resemblance of languages or by any other traces. On passing over a river, or a ridge of mountains, the traveller finds the race of men completely changed, as far as the race is to be distinguished by customs and peculiar language. There remains in some places a tradition of great empires which have been dismembered, but they are so completely disintegrated, that the petty tribes within their pretended limits, have lost all vestiges of any connexion with each other.

SECTION II.

Of the Nations bordering on the Rivers Senegal and Gambia.

IN the most northerly tract of Guinea, we meet with three nations of considerable extent and celebrity. I mean the Yolloffs, the Mandingos, and the Foulahs,* who, though they occupy contiguous countries, are distinguished from each other in form, complexion, and manners, and appear to be entirely unconnected by language.

¶ 1.—*The Yolloffs.*

THE country between the Senegal and Gambia, and from Cape Verd, as far as the boundaries of the Foulahs, is the abode of the nation of Yolloffs, or Jaloffs, who were formerly united under the dominion of the Bourb' Ioloff, or Yoloff Emperor, but are now divided into several states. The Yolloffs are described by travellers as a very fine race of people: they are tall, well made, of noble stature; their countenances are ingenuous and agreeable, but have, in some degree, the flat nose and thick lips, common to many negro nations, though many of them have regular features. Their hair is crisp and woolly; their colour is a fine, deep,

* It has often been said, that the Foulahs ought not to be classed with Negroes. If we consider all the Foulah tribes collectively, they are not so distinct from the neighbouring African nations, as some writers have thought. However, I do not assume any hypothesis respecting the affinity of these nations.

clear black. They are cheerful and indolent. They have a peculiar language, which is said to be harmonious. This circumstance, that the Yolloffs at the northern extremity of Negroland, are of a deep black colour, has drawn the following remark from a traveller well acquainted with the nations of Africa.

"This race of Negroes, the most handsome and the finest black of all those dependent upon the government of the Senegal, proves that the deepest colour does not arise solely from the heat of the climate, nor the being more subjected to the vertical rays of the sun, but results from other causes. For the Iolloffs are to the north of Nigritia, and the further you recede from them and approach towards the line, the black colour of the negroes becomes less and less strong and unmingled."*

¶ 2.—*The Mandingos.*

THE Mandingos are a numerous and widely extended race in Western Africa. Their original country does not appear to be exactly known. It is supposed by some to be situated between the sources of the Gambia and the town of Kong, in a mountainous part of Africa.† They now form many states on both sides of the Gambia. On the right bank, the kingdoms of Barra, Kolla, and Yani, are peopled by Mandingos. In the interior their language is spoken; Bambouk and Bambarra are Mandingo states. In fact, the Man-

* Golberry, i. p. 75. † Golberry, ii. 109.

dingos constitute the bulk of the population in all those parts of Africa through which Mungo Park travelled.

The Mandingos are docile, cunning, indefatigable. "Their colour is black, with a mixture of yellow: their features are regular, and somewhat resemble those of the natives of India, being much smaller than the lineaments of other Negroes, and their faces being longer."* Both the Mandingos and Yollofs clothe themselves in cotton shirts and garments of their own manufacture.

§ 3.—*The Foulahs.*

A THIRD nation, which has long been the most powerful in northern Guinea, are the Foulahs. The principal body of this people occupies an extensive mountainous country around the sources of the Senegal, Gambia, and Rio Grande, which is termed Fouta-Jallo. The city of Teemboo is their capital, and contains about 9,000 people. Like ancient Rome, it is a military residence, and the centre from which the neighbouring countries have been subdued. The nations of this territory are industrious and intelligent. They cultivate the soil, have horses and cattle, and work in iron, silver, and leather. Teemboo was visited in 1794 by two Englishmen, Messrs. Watt and Winterbottom; and in 1818, by M. Mollien, a Frenchman. Besides Fouta-Jallo, the Foulahs possess many other states in Africa. One of them is Fouta-Torro,

on the Senegal, to the eastward of the Yoloff country. Here they are known by the name of Poules. They possess Bondou,* Massina, and many countries on the Niger, even as far as Bornou. Wandering tribes of the same people are found to the northward in the great desert, under the name of Fellata, who have extended their incursions to the neighbourhood of Fezzan. These Fellata have been identified with the Foulahs of the Senegal, by the comparison of dialects.

Mr. Park, who traversed a part of the country inhabited by the Foulahs, says that their complexion is not black, but of a tawny colour, which is lighter and more yellow in some states than others. He observes that they have small features, and soft silky hair, without either the thick lips or the crisp wool which are common to the other tribes in the vicinity. They are agricultural and pastoral people, of gentle manners and dispositions. They rank themselves among white people, and look upon the neighbouring nations as their inferiors †.

Dr. Winterbottom, to whom we are indebted

* Mollien, i. 329.

† For information concerning the nation of Foulahs, see Golberry's Travels in Africa; Mr. Park's First Travels; Winterbottom's Account of the Negroes near Sierra Leone; Mollien's Travels to the Sources of the Senegal and Gambia. See also the older accounts in the Modern Universal History; and Professor Vater's Remarks in the third volume of Mithridates; accounts of the Fellata tribes in Appendix to Burckhardt's Travels in Nubia, and in Lyon's Travels in Northern Africa.

for the most accurate and important information respecting the inhabitants of western Guinea, observes that the Foulahs are, for the most part, of a lighter complexion than their neighbours on the coast. He adds, "But though less black than some of their neighbours, the Foola complexion can only be regarded as an intermediate shade between the darkest African and the Moor. Major Rennell, in his valuable additions to Mr. Park's interesting account of his travels, is of opinion, that the Foolas are the Leucæthiopes, of Ptolemy, and Pliny. But the propriety of the term white-negro, applied to a people of a dark mahogany colour, does not appear very striking. The idea of a nation of white negroes in Africa, most probably arose in consequence of that curious variety, the albino, having been accidentally discovered; and from a similar cause, perhaps, the learned Haller held the same opinion. But as a farther proof that the Foolas are not so white as the term Leucæthiopes would suppose, Mr. Watt and my brother found that a Mulatto had resided some years at Teembo, before they arrived, and had pretended to the Foolas that he was a white man."*

Monsieur Golberry, a lively and entertaining writer, and a man of correct observation, has given us the following description of the Foulahs:—

* Winterbottom's Account of the native Africans of Sierra Leone, &c. vol. i. p. 185.

"The legitimate Foulahs," says he, "are very fine men, robust and courageous. They have a strong mind, and are mysterious and prudent; they understand commerce, and travel as merchants; they are formidable to their neighbours. Their women are handsome and sprightly; the colour of their skin is a kind of reddish-black,—*noir rouge*; their features are regular, and their hair is longer, and not so woolly as that of the common Negroes."*

However, there are other tribes or families of Foulahs, of much lighter complexion than those above described. These are regarded by M. Mollien as a people of distinct race, though speaking the same language as those whom he terms black Poules, meaning the present inhabitants of Fouta-Jallo. The red Poules are thus described by Mollien.

"The genuine, or original Poules," says this traveller, "are of a red or copper colour; they are of weaker person and constitution than the black Poules; their features are like those of Europeans, except that their lips are somewhat thicker; their hair is long, but a little woolly. The women are well made, and pretty when young, but very ugly after they have borne children." Individuals are not unfrequently seen among the red Poules, who are nearly as fair as Europeans; M. Mollien mentions one, whom he supposed to be an al-

* Golberry, Voyages en Afrique. English translation, p. 72.

bino, but on examination he was convinced of his mistake.*

These red Poules, according to Mollien, are not the majority of the nation, but form wandering tribes, who are met with for the most part in the outskirts of the Foulah country, or in the surrounding solitudes. This author says, that the black Poules are a people sprung from an intermixture of race between the red Poules, whom he calls the original people, and some of the black nations in the vicinity of Fouta. According to him, the red Poules formerly occupied all Foutatorro, but were dispossessed of it by the Torodos, a mixed progeny of their own ancestors and the neighbouring Yollofs and Serrères, who drove the genuine Poules out of their country. In Fouta-jallo, he says, the red Poules continually diminish in number, so that it is found necessary to allow to the offspring of red Poules with Negro slaves the inheritance of their privileges, such as that of being chiefs of villages.† The present Foulahs of Jallo are descended, says Mollien, from the red Poules and the Jallonka. The Jallonka nation are the inhabitants of a mountainous district. These people themselves, are said by Mollien, to be of a reddish colour.‡ He conjectures the Jallonka to be the aboriginal inhabitants of Fouta-jallo, and supposes the Foulahs, as well as the blacker race of Yollofs, to have come originally from the north

* Mollien. Voyages, &c. ii. p. 113. † Mollien, *ibid.* ii. p. 185.

‡ D'une couleur un peu rougeâtre. Mollien, *tom.* ii. p. 179.

of Africa. They were mentioned however by Jobson, in the seventeenth century, in the countries where they now reside.

There appears to be some confusion and obscurity in the account which M. Mollien has obtained of the races of black and red Poules. Perhaps his opinion that the darker coloured people are a mixed race, is a conjecture adopted to account for the phenomena observed, rather than the result of accurate information.* Among the red Poules themselves it seems that there is considerable variety of colour, and some approach to the Negro character, since their hair is somewhat woolly, and their lips thick. And the Jallonka are said to be a red people.

The Foulahs and the Jallonka afford us the first example of a kind of people, of which many other instances will occur to our notice in various parts of Soudan, where in the midst of black nations tribes of red or copper-coloured people are found, in insulated districts, and chiefly in the mountainous tracts. The country of the Foulahs is of great elevation. It contains the sources of many great rivers, as the Senegal, Gambia, Rio Grande, and according to Mollien, the Niger.

* If the black Poules were, as he supposes, a sort of Mulattoes, descended from a mixture of a fair people with genuine Negroes, they would resemble other Mulattoes, and particularly their hair would be harsh and crisp, or half woolly. But Mr. Park informs us, in a passage already cited, not only that the other physical characters of these people are peculiar to them, but that their hair is soft and silky.

¶ 4. *Some other Nations of inferior note.*

SOME other nations of inferior note are mentioned by travellers in this region of Africa: among these are:—

1. The Serawollies, or, as the French call them, Seracolets, are an active and intelligent people, engaged in traffic, supposed to constitute a distinct nation. They inhabit the kingdom of Kajaaga, or Galam, on the southern bank of the Senegal. Their language is peculiar to them: it has, however, never been accurately compared with the vocabularies of the neighbouring nations, and may perhaps bear some affinity to the Mandingo. Mr. Park says, their complexion is a jet black; they are not to be distinguished in this respect from the Yollofs.*

2. The Serrerers are tribes of naked savages, who wander with their flocks about Cape Verd, and in the neighbourhood of the Joloff countries. They are considered as a distinct people, and by some thought to be the most ancient inhabitants of these parts. A considerable resemblance has been observed in their vocabulary to that of the Yollofs.†

* Park's Travels, p. 63. Mollien, ii. p. 166. Mithridates, iii. p. 160.

† Mollien, i. p. 272. Mithridates, iii. 139.

SECTION III.

Of the Nations between the Gambia and the Gold Coast.

IN that tract of country which extends from the southern bank of the Gambia to Cape Tres Puntas, where the Gold Coast begins, a great variety of nations are found, distinguished from each other by language.

1. The Feloops inhabit the banks of the Casamanca: their chief town or village is Vintain; their manners and language are barbarous: they go nearly naked. Their hair is very woolly, but longer than that of other Negroes. Their colour is a deep black, their skin rough; their features regular, more like the Indian than Negro; their countenance gloomy; their manners taciturn: they are small, short, but strong and agile.*

2. The Papels inhabit the borders of the Cacheo, and the country between that river and the Geba; they are all pagans. They have dull, gross countenances and a ferocious appearance.†

3. On the frontiers of the Papels dwell the Balantes, who have an entirely different language; They exceed the Papels in ugliness.‡ These people esteem rats a great delicacy.

4. The Bisagos occupy the islands and shores near the mouth of the Rio Grande. They eat dogs and spend their time in fishing.

* Park. *ibid.* Golberry, ii. 295.

† Golberry, i. 77. Mollien, ii. 259.

‡ Mollien, *ibid.*

5. On the bank of the Geba, opposite Bissao, dwell the Biafares or Jolas, who are the finest race of people on this coast; their territory reaches in the interior as far as Koli. This place is the frontier of the—

6. Basares, a nation who are considered as cannibals. In the same vicinity are—

7. The Naloubes, who are separated by the Rio Grande from the Biafares.*

In the short extent of maritime country which reaches from the Rio Nunez to the Sierra Leone river, there are four distinct nations. Their languages, as we learn from the intelligent Dr. Winterbottom, are essentially different, and not merely dialects of each other; they are indeed further subdivided into dialects. These nations are the Soosos, the Bagos, the Timmanis, and the Bulloms. The mountainous country behind them is a part of Foota-jallo.

Dr. Winterbottom informs us that the whole coast, from the Rio Nunez to the Island of Sherbro, was formerly divided between the Bagos and Bulloms. The former, who were to the northward, were expelled from a great part of their territory by the Soosos; and the Bulloms, a people of mild character, were in like manner driven out by the Timmanis, a warlike nation from the interior. Still, however, the Bullom language is spoken along the coast as far as Shebar.†

* Mollien, tom. ii. last chapter.

† Winterbottom, *ubi supra*, vol. i.

The coast extending from the Sherbro to Cape Palmas is termed the Grain or Pepper Coast. The country behind this coast is occupied by the Quojas; but this name seems to be used indefinitely, and to include more than one nation.

1. The Vy-berkoma are said to be the remains of the ancient inhabitants of Cape Monte. These are probably the nation termed Foy or Puy, whose language is spoken on the coast to the eastward of the Sherbro.*

2. The Quoja-berkoma are the true Quojas, who are said to have come from the interior. They border towards the north and east on the Konde-Quojas, or High Quojas, who speak a different language, and also on the Galas, the Hondo, the Curvas, and the Folgias. To this last nation the Quojas are tributary, as the Folgias themselves are dependant on the empire of Manou in the interior.†

The country on the coast near the Sherbro and Cape Palmas, contains, according to Hutton, three kingdoms. Immediately after the mouth of the Sherbro is the kingdom of Cape Mount, which extends about 160 miles from west to east, and reaches 100 miles into the interior. Its capital is Cousseca, a city which is said to be as large as Ashantee, and to contain 15,000 inhabitants. The kingdom of Sanguin succeeds to that of Cape Mount, and reaches about fifty miles along the coast. To

* Barbot's Account of Guinea. Winterbottom, *ubi supra*. Vater. Mithridates, th. iii.

† Barbot, book ii.

the eastward of Sanguin, near Cape Palmas, is Settra Croo, the capital of the people called Kroomen.*

The Kroos, or Kroomen, live on the coast near to Cape Palmas; they have a guttural language; are remarked for the robustness and fleshiness of their bodies; they pass their time much in the water, and feed on flesh and rice.

Between Cape Palmas and Cape Tres Puntas, or Three Points, is the Ivory or Tooth Coast. The principal nation in this district are the Quaquas, who have a barbarous inarticulate language. The Quaqua blacks are, for the most part, tall, stout, well-shaped men, but they look fierce and frightful at first sight. They file their teeth, which are irregular and crooked, as sharp as awls. They let their nails grow half an inch long, and wear their hair long and plaited, daubed with palm oil and red earth. On meeting, they greet each other with the exclamation, *Qua-qua!* whence the denomination given them by Europeans.†

Behind the Ivory coast, stretching to the north-west of Ashantee, is a great and powerful nation, called the Buntakoos.‡

* Hutton's Account of the Gold Coast, &c.

† Barbot, *ubi supra*.

‡ Hutton, *ubi supra*.

SECTION IV.

Of the Nations inhabiting the Gold Coast, and the countries in the interior adjacent.

THE western boundary of the Gold Coast is either the Cape Tres Puntas, or it is the river Assinee, which falls into the sea about twenty-five miles west of Apollonia, or thirty west of the river Ancobra. The Gold Coast extends thence to the Rio Volta, its eastern boundary, and is about 180 miles in length. Until a very recent period the most correct accounts of this country and its inhabitants, were only to be found in the works of Danish missionaries.* Mr. Bowdich's journey to Ashantee has furnished some important additions to our previous knowledge.

The country behind the Gold Coast, to a remote distance in the interior, is divided into a number of petty states, which are often at war with each other; at other times subjected to the transient predominance of some fortunate chieftain. The king of Ashantee is at present the most powerful sovereign in these parts.

One language, divided into a variety of dialects, is the mother tongue of most of the nations in this tract. The dialect prevalent on the coast is the Fetu or Fantee. This is also called the Amina, from a numerous people in the interior, whose

* Professor Vater has collected the statements of Römer, Isert, Oldendorp, and Protten, in the third volume of the *Mithridates*.

vernacular speech it is said to be.* The Fantee language was formerly supposed to be distinct from the Ashantee, but they are now known to be cognate dialects.† “The Ashantee,” says Mr. Bowdich, “the Fantee, Warsaw, Akim, Assim, and Aquapim languages, are indisputably dialects of the same root.” Part of the Ahanta nation belong to the same stock, and the whole of these people class themselves, without any regard to their modern national distinctions, into twelve tribes or families, which are now indiscriminately mixed under different sovereigns.‡ According to Mr. Bowdich there is a large town in the interior termed Inta, further from the coast than Ashantee, to the north-east, whence the whole of these nations report traditionally that they emigrated. Inta has hitherto been thought, but erroneously, to be identical with Ashantee. Inta is the most remote place to which the diffusion of the Ashantee language can be traced.§

It therefore may be concluded, that all the na-

* Römer's *Nachrichten von der Küste Guinea*, Copenhagen, 1767, cited by Vater.

† Bowdich, Hutton.

‡ Bowdich.

§ Ibid. Römer however places a nation of Crepees contiguous to the Ashantees, and separated from them by the Rio Volta, and these he supposes to extend behind the Slave country in the interior. The reader will find these statements respecting the languages of the Gold Coast nations fully established by the vocabularies at the end of Bowdich's *Mission to Ashantee*, Hutton's *Mission to the same place*, and in the authorities cited by Professor Vater.

tions on the Gold Coast, which have been enumerated, are of one race, which may be termed, for the sake of distinction, the Inta race; that name including the Inta, Fantee, Asiantee, and all those tribes who speak dialects of one language.

The Negroes of this Coast are thus described by Barbot.

“The blacks in this part of Guinea are generally well-limbed and proportioned, being neither of the biggest nor of the lowest size and stature; they have good oval faces, sparkling eyes, small ears, and their eyebrows lofty and thick; their mouths not too large; curious, clean, white, and well-ranged teeth; fresh, red lips, not so thick and hanging down as those of Angola, nor their noses so broad. For the most part they have *long curled hair, sometimes reaching down to their shoulders*, and not so very coarse as theirs at Angola; and very little beards before they are thirty years of age. The elderly men wear their beards pretty long. They have commonly broad shoulders, and have large arms, thick hands, long fingers, as are their nails, and hooked; small bellies, long legs, broad large feet with long toes; strong waists, and very little hair about their bodies. Their skin, though but indifferent black, is always sleek and smooth. Their stomach is naturally hot, capable of digesting the hardest meat, and even raw entrails of fowls, which many of them will eat very greedily. They take particular care to wash their whole bodies morning and evening; and anoint them all over

with palm-oil, which they reckon wholesome, and that it preserves them from vermin, which they are naturally apt to breed. In short, they are for the most part well-set, handsome men in their outward appearance, but inwardly very vicious.

“As for their natural parts, they are, for the most part, men of sense and wit enough; of a sharp, ready apprehension, and an excellent memory, beyond what is easy to imagine; for though they can neither read nor write, they are always regular in the greatest hurry of business and trade, and seldom in confusion. On the other hand they are extremely slothful, and idle to such a degree, that nothing but the utmost necessity can induce them to take pains; very little concerned in misfortunes, so that it is hard to perceive any change in them, either in prosperity or adversity, which among Europeans is reckoned magnanimity; but among them some will have it pass for stupidity.”*

“The black women are straight and of moderate stature, pretty plump; having small round heads; sparkling eyes, for the most part *high noses*, somewhat hooked, *long curling hair*, little mouths very fine well-set white teeth, full necks, and handsome breasts. They are very sharp and witty, and very talkative.”†

This description is evidently intended to apply to the nations of the Fetu or Fanti race, who are the general inhabitants of the Gold Coast. The Asiantees are said to be distinguishable from them

in their persons as well as in their carriage. They are of blacker hue, more agile than the Negroes of the coast, and generally of better make.*

Mr. Bowdich says, "The men of Ashantee are very well made, but not so muscular as the Fantees; their countenances are frequently aquiline. The women also are generally handsomer than those of Fantee, but it is only among the higher orders that beauty is to be found, and among them, free from all labour or hardship, I have not only seen the finest figures, but in many instances *regular Grecian features*, with brilliant eyes, set rather obliquely in the head." He adds that the features in this class of females appeared to be Indian rather than African. They are selected from the handsomest slaves or captives.†

Mr. Hutton has given nearly the same comparative estimate of the persons of the Fantees and Ashantees.

The people of Acra, near Christianburg, though surrounded by tribes of the Inta nation, are a distinct race, having a language of their own and peculiar manners. Acra was a powerful state until it was conquered by the people of Aquambo, when many of them fled to Little Popo, and founded a new state on the Slave Coast. The Mountain Negroes of Adampi speak the language of Acra.

The people of Acra practise circumcision — *utriusque sexus* — which is elsewhere, in these countries, unknown. The peculiar language and cus-

* Insert apud Mithridat. p. 228, & † Bowdich, p. 318.

toms of these people, their situation on the Coast, surrounded by people of the Inta race, indicate them to be the remains of a more ancient population, who probably possessed these countries before the Fantees emigrated from the interior.

The following is a description of the persons of these Negroes, chiefly, as it seems, applicable to the race of Acra, by Isert, the Danish traveller.

“Almost all the Negroes are of a good stature, and the Akra Negroes have remarkably fine features. The contour of the face, indeed, among the generality of these people, is different from that of Europeans; but at the same time faces are found among them, which, excepting the black colour, would in Europe be considered as beautiful. Commonly however they have something apish. The cheek-bones and chin project very much, and the bones of the nose are smaller than among Europeans. This last circumstance has probably given rise to the assertion, that the Negro women flatten the noses of their children as soon as they are born. But noses may be seen among some of them, as much elevated and as regular as those of Europeans. Their hair is woolly, curled, and black; but sometimes red. When continually combed, it may be brought to the length of half a yard; but it never can be kept smooth.”*

* P. E. Isert. *Reis na Guinea*; Dordrecht, 1790: translated in *Philos. Mag.* vol. iii. p. 144.

SECTION V.

Of the Nations on the Slave Coast, and the interior country.

THAT part of Africa, which lies to the eastward of the Gold Coast, is termed the Slave Coast. It is bounded by the Rio Volta to the westward, and on the eastern side borders on the great empire, or unknown region of Benin. This coast, and the countries in the interior behind it, contain a very remarkable and interesting race of people, who have been divided immemorially into several nations, but speak one language, and resemble in person, disposition, and manners.

The people of Great Ardrah were formerly the most powerful of these nations, and it is said that the other states were tributary to them; their principal rivals were the Whidahs, a warlike nation on the coast, whose country was celebrated by all voyagers for its beauty and fertility, and the great number of its villages and inhabitants. Great Popo, to the westward of Whidah, was another flourishing state, until all these countries were depopulated by the Dahomans, a people, further in the interior, who speak the same language; the Mahas are another nation westward of Dahomy, who have also the same speech; but the people of Coto, near the limits of the Gold Coast, speak the language of Acra; this is therefore to be considered as a foreign colony on the Slave Coast, as also is Little Popo, which was founded by fugitives from Acra,

driven out of their country by the Aquamboes in 1680.*

The Dahomans were formerly called Foys, and inhabited a country called Fouin, on the north-eastern part of their present country. Their conquests began about the year 1625, and early in the last century they over-ran and depopulated Ardrah and Whidah, and possessed themselves of the whole country.

The Dahomans are a very intelligent, brave, and polite people, but cruel and revengeful; and their history abounds with instances of that barbarous atrocity, which is a common feature of all Pagan societies. The Dahoman government is the finest example in the world of pure monarchy.† Among the Whidahs the priests had great influence: the people worshipped serpents, and in the war with Dahomy confided the protection of their countries to the snake, their fetische, or god.

In their persons the Whidahs are described (and the description seems to apply equally to all

* Mod. Hist. Dalzel.

† "The doctrine of passive obedience and non-resistance," says Mr. Dalzell, "is universal among them." So great a personage is the king, that the people affect to believe that he never eats like other mortals, but his majesty sometimes condescends to drink in the presence of his loyal subjects. When the ministers attend a levee, they enter the apartment crawling on their bellies, and never dare to elevate themselves from this humble posture: the honour of knighthood is conferred, not by dubbing, but by means of a glass of liquor, which is received by the subject lying on his back, while the king holds the bottle to his mouth. See Dalzell's Introduction.

the nations of this race) as generally tall, well made, straight, and robust. Their complexion is black, but not so jet and glossy as that of the people on the Gold Coast, and still less so than that of the Negroes on the Senegal and Gambia. They excel all other negroes in industry and vigilance.*

It seems that there are other nations of the same race who dwell in the interior.† Such are the Watje who border on the Amina, and the Atje, according to the accounts of Oldendorp.‡ These people speak dialects of the language of Ardrah. There is a powerful nation to the north-east, who have occasionally over-run Dahomy with numerous armies of cavalry. They are called Ayoes or Okyon. Dalzell conjectures this to be the Gago of Leo Africanus.

SECTION VI.

Of the Natives of Benin.

To the eastward of the Slave Coast is the vast region of Benin, comprehending an extent of coast

* Mod. Hist.

† Vater had some doubt of the identity of language among these nations, but without reason. He has himself proved the Popo language to be a dialect of the Whidah, by a comparison of vocabularies, and extended the same observation to the Watje, and he cites Norris, who asserts that the Dahomans speak a dialect of the language of Ardrah. Vater's doubt is whether the Ardrah and the Whidah language have the like affinity. But they are set down by Barbot as identical, and the same account of all these people is given by other writers.—See Bosman and Dalzell's Hist. of Dahomy.

‡ Mithridates.

of nearly 300 leagues. The nations of this part of Africa are almost entirely unknown even by name.

From Calabar and other places in the gulf, or bight of Benin, many slaves were formerly carried to the colonies. All the Negroes from these regions are called in the West Indies, Eboes, except a particular class distinguished by the name of Moccos. In complexion they are much yellower than the Gold Coast and Whidah Negroes; but their colour is said to be a sickly hue, and their eyes to appear as if suffused with bile, even when they are in perfect health. Mr. Edwards, from whom I have taken this account, adds, "I cannot help observing, that the conformation of the face, in a great majority of them, very much resembles that of the baboon, the lower jaw being more elongated among the Eboes than in any other Africans."*

* Edwards's Hist. of the West Indies, vol. ii. p. 74.

CHAPTER IV.

Of the Races of People in the Interior of Africa.

SECTION I.

Division—Nations to the Southward—Felatah tribes from the West—Negro Empires.

THE interior of Africa is said to be traversed about the 10° of north latitude by a great chain of mountains, termed Jibbel Kumra, a barrier which divides the whole continent and its inhabitants into two distinct portions. The vast and unexplored wilderness to the southward of this chain contains lofty mountainous tracts, inaccessible to caravans, the abodes of numerous tribes of the most wild and ferocious character, who are idolaters and naked savages, and are said to tallow their skins, and stain their teeth. As far as these tribes are known, they are Negroes with long, woolly, or bristly hair.*

To the northward of this chain the nations of Africa are comparatively civilized, and most of them have adopted Islam. This part of the continent is divided, in all our maps, into three great empires, or divisions of countries, Tombuctoo and its dependencies, Haoussa, or Soudan, and Bornou. The population consists partly of Negroes,

* Such are the accounts obtained by Major Denham, the first Christian traveller who has approached the mountains of the Moon. Similar notices may be collected in very distant quarters of the pagan tribes in the interior, to the southward of that chain; as of the people behind Mozambique, seen by Mr. Salt, and of the Giagas to the north-eastward of Kongo.

who were the aboriginal inhabitants, and partly of Felatah tribes, who came into Soudan from the west.

¶ 1. *Felatah Tribes.*

THE Felatah tribes are known to extend "over an immense space of country; they are found through the whole of Soudan quite to Tombuctoo; and at D'jennie, on the Niger, they form the greatest part of the population. Still further to the westward they are in great numbers." This line brings us near to the country of the Foulahs, and a comparison of vocabularies seems to afford sufficient evidence that the Foulahs and the Felatah tribes are of the same original.*

The Felatahs are "a very handsome race of people, of a deep copper-colour, who seldom mix their blood with that of Negroes, have a peculiar language, and are Moslems."† It appears, however, that the shade of their complexion is subject to varieties; individuals are occasionally seen among them who are black.‡

¶ 2. *Negro Empires.*

1. Among the Negro nations there were in the time of Leo, six kingdoms, the natives of which spoke one language; among these were Tombuctoo and Ginea, probably, as Dr. Vater has conjec-

* See an account of the Felatah and Foulah vocabularies in Note B.

† Account of an Exped. to Mandara, by Major Denham, p. 115.

‡ Journey to Sackatoo, by Captain Clapperton, p. 27. The author describes the kadi of Katagum "as a coal-black Felatah, with a hook-nose, large eyes, and a full, bushy beard."

tured, the Jenné of Mungo Park. This language may be the Jenné Kammo, or Kalam Soudan, said by Park to be the idiom spoken at Jenné, where the Mandingo, prevalent through Guinea, ceases to be understood.

2. To the eastward of the countries belonging to the above division, is Haoussa, called also Soudan, though this name is sometimes used to comprehend all the Negro countries in the interior of Africa. Haoussa is said to include the whole region between Tombuctoo and Bornou.*

According to Hornemann's description of them, the people of Haoussa are "Negroes, but not quite black; they are the most intelligent nation in the interior of Africa, they are distinguished by an interesting countenance; their noses are small and not flattened; and their figure is not so disagreeable as that of the Negroes of Guinea: they are much devoted to pleasure, to dancing and singing."

3. Many countries to the eastward of Haoussa are said to have been subject to the sultan of Bornou. The Bornouese are now Moslem, but the Bedees, in the mountains, who speak the same language, are still pagans and savages.†

Among the countries heretofore really, or nominally subject to Bornou, was Mobha, or Borgbo. An intelligent native of Borgbo informed Dr. Seetzen, who conversed with him at Cairo, that twenty languages are spoken in that country, without reckoning the superior dialect, or that

* Hornemann's Travels.

† Clapperton, p. 15.

of general communication, which is termed Mobha. Messrs. Burckhardt and Seetzen have both obtained vocabularies of this language, which agree very nearly.* It is totally different from the Fourian, as well as from all the languages spoken in the neighbouring countries, as far as they are known, unless it has some affinity to the Shilluk.

The people of Bagermeh have a peculiar language, different from those of Borgho and of Darfour: they are the cotton manufacturers of the Soudan. A native of this country informed Seetzen, that the natives are black, but that there are many white men among them. Mr. Lucas was told by a Mahomedan traveller, that they are black, but not negroes; but we have no very accurate accounts of their physical characters.

The empire of Bornou is of great extent and importance. Lucas was informed, that thirty distinct languages are spoken in the dominions of Bornou. These people, according to Hornemann, are completely negroes: they are blacker, and in form a stouter and coarser people than the race of Haoussa or Afnu.† The men of Bornou prefer women only of a large size.

* Mithridates, iii. *ubi supra*. Review of Burckhardt's Travels, in the Annals of Oriental Literature.

† These statements respecting the physical characters of the people of Bornou and other countries in the interior of Africa, coincide with the later accounts transmitted from English travellers, who have penetrated into that kingdom. This may be seen in several articles in the Quarterly Review, particularly in one in the thirty-first volume.

SECTION II.

Negro Nations to the eastward of Bornou.

BETWEEN Bornou and Nubia, and on the north-eastern frontiers of Bornou, there are several other nations, chiefly of Negroes.

To the west of Nubia the nearest negro country is Kordofan, the natives of which are Mahomedans, but speak a dialect of the language of Four,* and are therefore of the same race as the people of Darfour. The Fourians themselves are Moslemin, and are in that state of semibarbarous society to which the introduction of Islam has every where given rise in Africa; in it the faculties are awakened from the brutal sloth of savage life, the intellects are sharpened, but the morals are rendered more depraved rather than improved. The people of Darfour seem to have formed wandering tribes, previously to their conversion to Islam, and were in no respect distinguished from the pagan races who still possess the neighbouring countries.† They now dwell in towns, and resemble in manners the natives of Sennaar, Shendy, Dongola, and similar places; their language has a great mixture of Arabic. "In their persons they differ from the Negroes of the Coast of Guinea; their hair is generally short and woolly, though some are seen with it of the length of eight or ten inches, which they esteem. Their complexion is for the most part *perfectly black*."

* Burckhardt's Travels in Nubia. † Brown's Journey to Darfūr.

Between Darfour and Habesh, in the valleys formed by the branches of the Nile, is the pagan nation termed the Shilluk; they are separated from Darfour by the Bahr el Ada; and the Bahr el Abiad flows through their country, at the passages of which the Shilluk collect tolls. They are naked savages, and worship trees. A branch of them at the beginning of the sixteenth century obtained possession of Sennaar, when they became Mahomedans, and assumed the name of Funge, or conquerors.*

The slave-trade is the chief traffic in all the Mahomedan countries in Soudan. The slaves are brought from the neighbouring pagan countries. The slaves brought from Kordofan to Darfour are chiefly from the idolatrous countries of Benda, Baadja, Fetigo, and Fertit to the south and south-west of Sennaar, and from twenty to forty days south of Cobbe. Each of these nations speaks a different language.† In complexion, and other characters, they perfectly resemble the natives of Guinea.‡

SECTION III.

General Remarks on the Physical Characters of these Nations.—Black Races—Red Races.

THE foregoing are the principal nations of Soudan, or interior Negroland. The races of men in these countries are very numerous, as far as

* Mithridates, th. iii.

† Burekhardt, *ubi supra*.

‡ Brown, *ubi supra*.

varieties of language can be supposed to discriminate men into different races.

The principal nations of Soudan are, as we have seen, Negroes, but through many of these countries are dispersed tribes of savages of a different sort, who have neither the Negro features nor complexion, but are of a red or copper colour, and have hair like that of Europeans.

We learn from the intelligent Mr. Brown, that the countries of Darfour, Borgho, and Bagermeh, are bounded to the south-west, south, and south-east, and in many places intersected by tribes of pagan savages, who inhabit woody and mountainous districts. Some of them are fierce warriors, and fight with poisoned arrows and ignited spears. These tribes are of two descriptions; one of them has woolly hair and Negro features; the others are of a reddish colour, among whom are the natives of Harraza, to the north of Kordofan.*

Darkulla is a southern country, whither the traders of Darfour and Borgho sometimes resort to buy slaves in exchange for salt, which they carry with them. The people are pagans; they are remarkable for honesty and cleanliness; they are partly Negroes, and partly people of a reddish or copper colour. Brown says, that the slaves brought from Darkulla are of a red colour; he places it to the south-west of Darfour. Probably it is beyond Bagermeh, and in the empire of Bornou.

* Brown, *ubi supra*.

SECTION IV.

People of Fezzan.

THE people of Fezzan are to be reckoned among Negroes, though not of unmixed race. They are thus described by Capt. Lyon:—

“ The general appearance of the men is plain, and their complexion black; the women are of the same colour, and ugly in the extreme. Neither sex is remarkable for figure, height, strength, vigour, or activity. They have a very peculiar cast of countenance, which distinguishes them from other blacks; their cheek-bones are higher and more prominent, their faces flatter, and their noses less depressed and more naked at the top than those of other negroes. Their eyes are generally small, and their mouths of an immense width, but their teeth are generally good; their hair is woolly, though not completely frizzled.” They are a dull, phlegmatic people. The females bear children at twelve and thirteen years of age, and at fifteen or sixteen assume the appearance of old women. Their language is Arabic.

SECTION IV.
CHAPTER V.

*Nations of the north-eastern parts of Africa, including the
Empire of Abyssinia, Nubia, and Egypt.*

SECTION I.

Of the Empire of Habesh.

BEFORE we can be prepared to distinguish the various races of people in the north-eastern parts of Africa, it is necessary to make some observations on the history of two celebrated empires which have existed in the countries southward of Egypt. I allude to the kingdoms of Abyssinia and of Ethiopia, which by some writers appear to have been confounded, though in reality very distinct, not only with respect to the countries in which they were situated, but also as to the times of their origin and decline. The kingdom of the Abyssinians makes its appearance in history subsequently to the Christian era: it is hardly known before the time of Frumentius, who was ordained bishop of Ethiopia by St. Athanasius, and converted the monarch and his subjects to the Christian faith. It was situated in the country of Tigre, between the Arabian Sea and the river Tacazze. Its capital was the celebrated Axum or Axoume. But the old Ethiopian monarchy was situated on the banks of the Nile above Egypt. The chief seat of its power, and probably of the popu-

lation that belonged to it, was the Nilotic island of Meroë. It was celebrated in the earliest periods of history, is seldom heard of after the time of Cyrus, and is never mentioned after the age of Augustus Cæsar, and that of St. Luke. The people of this kingdom were an ancient African race, nearly connected with the old Egyptians. The nations who founded the empire of Abyssinia, were an Arabian colony.

We shall begin with an account of the empire of Abyssinia, and the people subject to it.

The Abyssinians give themselves the name of *Itiopjawan*, or Ethiopians, and term their country *Itiopia*. These appellations are evidently derived by them from the Greeks, who so termed them, when they found their way into the kingdom of Axum, the name of Ethiopian being, in later times, variously applied. And the Geez, or Abyssinian language, has been likewise improperly called Ethiopic, and the people have even been confounded with the Ethiopians, from whom they are entirely different.

Abyssinia, however, comprehends nations of different language and origin; some of these have been more or less mixed in modern times. Hence they are all termed *Habesh*, a name given them by the Arabs. But the *Habesh*, including all the nations subject to this empire, must be distinguished into several races. The two principal of these, which are all that I shall mention at present, are the Agaazi and the Amaara.

The Agaazi are properly the race of people inhabiting Tigré, which is the country lying eastward of the Tacazze. In this tract is situated Axum, the ancient capital of Habesh. The Agaazi were the people who founded the kingdom of Axum. The Geez was the native language of the Agaazi, and the prevailing language of Abyssinia at the time when the people were converted to Christianity. The Scriptures were, at an early period, translated into this language, and this is the well-known version, improperly termed the Ethiopic. Even now it is said, that the dialect of the province of Tigré, approaches to the old Geez, as it is known by books.

To the westward of the Tacazze, the prevalent language is the Amaaric,* or modern Abyssinian, which is now termed the *Lesan Neghus*, or royal idiom, because it is the language used at the court of Gondar. It is also the general language of the Abyssinian empire, being spoken not only in the province of Amaara, but likewise in those of Dembea, Gojam, Damot, Begemder, Samen, and Shoa. This is perhaps the *Káμαρα λέξις* which is mentioned by Agatharchides as the dialect spoken by the Troglodytes of Ethiopia. If so, it is a very ancient language, and was perhaps spoken in Abyssinia before the migration of the Agaazi from Yemen. According to Ludolph, and to Adelung and Vater, who have carefully examined the structure of this language, in the materials

* I write the word Amaaric on the authority of Burckhardt.

furnished by Ludolph's grammar and dictionary, the Amaaric is not, as some have thought it, a dialect of the Geez, but has a basis and structure entirely distinct and peculiar, though it has derived a great part of its present stock of words from the idiom of the Agaazi, who long held sway in Abyssinia. The Amaara are an ancient African nation, and their language of native origin. The Geez, as it is well known, is a very pure dialect of the old Arabic, and is an authentic voucher for the true origin of the Agaazi, whose descent from the Arabs of Hamyar, or the Homerites, which may be collected from several ancient writers, seems by this circumstance to be sufficiently established.*

The early history of the Axumite kingdom is involved in obscurity. Diodorus, Strabo, and Pliny, have given us the sum of the information they could each collect respecting the nations of Ethiopia, and the adjoining countries. From Strabo we have an abstract of the geographical collections of Eratosthenes and Artemidorus; and the personal observations of Agatharchides. They were well informed respecting the Ethiopians of Meroë and the Nile, who, in the time of Augustus Cæsar, were governed by a one-eyed queen,

* See Ludolph. Stephanus of Byzantium cites the Arabica of Uranius, a geographical writer, who is quoted by Tzetzes and Eustathius. Uranius placed the Abaseni or Habessines on the coast of Arabia next to the Sabæans, and added, that in their country myrrh and frankincense were produced.—Steph. voce *Αβασσην*.

Candace. But neither of the writers above-mentioned appears to have heard of the Axumite kingdom.

This would be unaccountable, if it were certain, as some modern writers have maintained, that Ptolemy Evergetes made an expedition into Ethiopia, and subdued all the principal places in the countries above Egypt, including the city of Axum itself. This has been believed by modern writers of great learning and sound judgment, not on the authority of ancient historians, who make no mention of it, but on the faith of two inscriptions. One of these was seen and copied by Cosmas Indicopleustes, a merchant who in the reign of Justin navigated the Arabian Gulf, at Aduli, on the African coast. In this the cities and nations, subdued by the arms of Ptolemy, are supposed to be enumerated; but among them it is remarkable that the name of Axum does not appear. The other is an inscription, which Bruce says that he discovered on a stone forming part of the royal seat at Axum, containing the name and title of Ptolemy. But it has been shewn to be extremely probable, if not proved, by Mr. Salt, that the inscription copied by Cosmas, is, in fact, two separate inscriptions, and that the part of it which relates to African conquests, appertains to an Abyssinian king, and has no reference to Ptolemy: and as for Bruce's inscription, it appears never to have existed but in the imagination of that ingenious traveller. An error of Cosmas, and a fic-

tion of Bruce, appear then to have been the whole foundation for the great achievements and Abyssinian conquests of Ptolemy.*

The earliest notice to be found in history of the Axumite kingdom, is in the *Periplus* of the Erythrean Sea, which was composed, according to Dr. Vincent's opinion, about the tenth year of Nero. In this work Axum is mentioned as a metropolis and royal city, and as a principal place in the transport of ivory to the Red Sea. The sovereign of the neighbouring countries was, according to the *Periplus*, named Zoskales, and he is said to have been a wise and good prince, and acquainted with the Greek language.†

It appears, indeed, that the arts of the Greeks and Egyptians had penetrated at this time into Abyssinia, and that Axum was a great city, and the seat already of an extensive empire, where the paganism of the Greeks prevailed. All this may be collected with sufficient evidence from the account given by Mr. Salt of Axum, and its obelisks, and particularly from an inscription in Greek, made in the time of king Aeizana, in whose reign Christianity was introduced. There was nothing, however, found among the ruins of this place, which belongs to a remote antiquity, or indicates

* It is impossible to account for the silence of Artemidorus and Agatharchides, respecting such an expedition, if it really took place.

† Arrian. *Periplus Maris Eryth.* apud Hudson. *Geog. Vet.* p. 4. tom. i.

a connexion with ancient Egypt under the Pharaohs, or with the old Ethiopians.*

How long before the reign of Zoskales the kingdom of Axum was founded, or how long the Agaazi had passed the Red Sea, is unknown, and we have no data for determining. It was probably some time before the Christian era. The chronicles of the Axumites are in the early times quite unworthy of credit. They contain an absurd monkish legend which derives the kings of Habesh from Solomon and the Queen of Sheba, although those princes were pagans, and latterly worshippers of the Grecian gods.†

It is not till after the mission of Frumentius, who was consecrated in the year 335, that the Abyssinian history is tolerably well known in consequence of the occasional intercourse which took place between the people now converted to Christianity and the Byzantine empire, and the priests of the Greek church. Before this event, it appears from the inscription at Axum, that the kings of that city had extended their conquests over the

* Even the obelisks have all the marks of Grecian workmanship, and are therefore in their date subsequent to the Ptolemaic age. See Mr. Salt's Travels in Abyssinia.

† The inscription copied by Mr. Salt, which is by far the most important document yet discovered with reference to Abyssinian history, is sufficient to refute the absurd story which has hitherto encumbered the annals of this country. It is quite unaccountable that this inscription should have escaped all the Catholic missionaries who have passed so many years in Abyssinia.

neighbouring countries, and had even subdued the Homerites on the opposite coast of Yemen. The scriptures were soon translated into the Geez language, and literature was cultivated at Axum till the fourteenth century, when in consequence of a revolution, the line of Zagean princes was overthrown, and the government was transferred by a new dynasty into the countries westward of the Tacazze; thenceforward the Amaaric became the prevailing language, and the Geez was only preserved in books and in ecclesiastical uses.

SECTION II.

Of the History of the Ancient Ethiopians.

THE term Ethiopian was applied in a very indefinite manner by the Greeks in later times; but there was a particular people to whom this appellation distinctly belonged. These were the natives of the country above Egypt, who inhabited the banks of the Nile, at least as far to the southward as the isle of Meroë, or the confluence of the Astaboras. These Ethiopians were intimately connected with the Egyptians in the early ages of their monarchy, and Ethiopian princes, and whole dynasties, occupied the throne of the Pharaohs at various times even to a late period before the Persian conquest. The Ethiopians had the same religion, the same sacerdotal order, the same hieroglyphic writing, the same rites of sepulture and ceremonies as the Egyptians. Religious pomps and processions were celebrated in common between the two nations.

The images of the gods were at certain times conveyed up the Nile from their Egyptian temples to others in Ethiopia; and after the conclusion of a festival, brought back again into Egypt.* The ruins of temples found of late in the countries above Egypt, and which are quite in the Egyptian style, confirm these accounts; they were doubtless the temples of the ancient Ethiopians. I do not remember that it is any where asserted that the Ethiopians and Egyptians used the same language, but this seems to be implied, and is extremely probable. We learn from Diodorus that the Ethiopians claimed the first invention of the arts and philosophy of Egypt, and even pretended to have planted the first colonies in Egypt, soon after that country had emerged from the waters of the Nile, or rather of the Mediterranean, by which it was traditionally reported to have been covered.

The Ethiopians in later times had political relations with the Ptolemies, and Diodorus saw ambassadors of this nation in Egypt in the time of Julius, or Augustus. An Ethiopian queen named Candace, made a treaty with Augustus Cæsar, and a princess of the same name is mentioned by St. Luke, in the Acts of the Apostles.

* Diodor. Sic. lib. i. *sub finem*. Eustath. ad Iliad, α, v. 424. Also Clarke's note, and Pope's on the same passage.

To this annual festival, when the gods visited Ethiopia to feast at the table of the sun, Homer probably alludes in these lines,

Ζεὺς γὰρ ἐν Ἀφρικῇ μετ' Ἀφροδίτας Αἰθιοπῆας
Χθρὸς ἔσθ' ἑνὶ μετὰ δαίτῃ, θεοὶ δ' ἅμα πάντες ἕποντο.

How far the dominion of the Ethiopian princes extended is unknown, but they probably had at one period possessions on the coast of the Red Sea, and relations with Arabia. After this time we find no further mention of the ancient Ethiopian empire. Other names occur in the countries intervening between Egypt and Abyssinia, and when the term Ethiopian is again met with in a later age, it is found to have been transferred to the princes and people of Habesh.

Such is the history of the Ethiopians among the profane writers. By the Hebrews the same people are mentioned frequently under the name of Cush, which by the LXX. is always rendered *Αἰθίοπες*, or Ethiopians. The Hebrew term is however applied sometimes to nations dwelling on the eastern shore of the Red Sea, and hence a degree of ambiguity respecting its meaning, in some instances. This subject has been amply discussed by Bochart and Michaëlis. I shall make a few remarks on the points which are agreed upon, or at issue between these writers.

Among the Hebrews of later times, the term Cush clearly belongs to the Ethiopians. The Ethiopians who were connected with the Egyptians by affinity and intimate political relations, are by the later Hebrew historians termed Cush. Thus Tirhakah, the Cushite invader of Judah, is evidently Tearchon, the Ethiopian leader mentioned by Strabo, and the same who is termed Tarakos, and is set down by Manethon in the well

known table of dynasties as an Ethiopian king of Egypt.*

In the earlier ages the term Cush belonged apparently to the same nation or race; though it would appear that the Cush or Ethiopians of those times occupied both sides of the Red Sea. The Cush mentioned by Moses are pointed out by him to be a nation of kindred origin with the Egyptians. In the Toldoth Beni Noach, or archives of the sons of Noah, which Michaëlis† has proved to contain a digest of the historical and geographical knowledge of the ancient world, it is said, that the Cush and the Mizraim were brothers, which means, as it is generally allowed, nations nearly allied by kindred.

It is very probable that the first people who settled in Arabia were Cushite nations, who were afterwards expelled or succeeded by the Beni Yoktan or true Arabs. In the enumeration of the descendants of Cush in the Toldoth Beni Noach, several tribes or settlements are mentioned apparently in Arabia, as Saba and Havila. When the author afterwards proceeds to the descendants of Yoktan, the very same places are enumerated among their settlements. That the Cush had in remote times possessions in Asia is evident from the history of Nimrod, a Cushite chieftain, who is

* For the proof of this position, I beg to refer the reader to my "Critical Examination of the Remains of Egyptian Chronology."

† Spicileg. Geographiæ Hebræor. Exteræ, auctore J. D. Michaëlis.

said to have possessed several cities of the Assyrians, among which was Babel, or Babylon, in Shinar. Long after their departure the name of the Cush remained behind them on the coast of the Red Sea.

It is probable that the name of Cush continued to be given to tribes who had succeeded the genuine Cushites in the possession of their ancient territories in Arabia, after the whole of that people had passed into Africa, just as the English are termed Britons, and the Dutch race of modern times, Belgians. In this way it happened, that people remote in race from the family of Ham are yet named Cush, as the Midianites, who were descended from Abraham. The daughter of Jethro, the Midianite, is termed a Cushite woman. Even in this instance the correspondence of Cush and Ethiopia has been preserved. We find the word rendered *Æthiopissa* by the LXX. and in the verses of Ezechiel, the Jewish Hellenistic poet, Jethro is placed in Africa, and his people termed Ethiopians. Sephora is introduced replying thus to a query of Moses:*

“Διβύη μὲν ἡ γῆ πᾶσα κλήζεται, ξένε,
οικοῦσι δ' αὐτὴν φύλα πανοίων γυνῶν,
Αἰθίοπες ἄνδρες μέλανες:”—

On the whole it may be considered as clearly established that the Cush are the genuine Ethiopian race, and that the country of the Cush is generally in Scripture that part of Africa above

* Euseb. *Præp. Evan.* lib. ix. cap. 28.—I believe this passage escaped both Bochart and Michaëlis.

Egypt. In support of these positions may be cited not only the authority of the Septuagint, and the writers above-mentioned, but the concurring testimony of the Vulgate, and all other ancient versions, with that of Philo, Josephus, Eupolemus, Eustathius, all the Jewish commentators and Christian fathers. There is only one writer of antiquity on the other side, and he was probably misled by the facts above considered, which, as we have shewn, admit of explanation.*

It may be worth while to notice, that the Ethiopians are, by the Greeks divided into two departments, probably those of the two sides of the Arabian Gulf:—thus Homer terms them—

Αἰθίοπας τοὶ διχθὰ δεδαίταί, ἔσχατοι ἀνδρῶν,
Οἱ μὲν δυσομένου Υπερίονος, οἱ δ' ἀνιόντος.†

I shall defer for the present what I have to say respecting the physical characters of the Ethiopians until I have surveyed the physical history of the

* The single dissentient is the writer of Jonathan's Targum, and on this authority the learned Bochart, supported by some doubtful passages, maintains that the land of Cush was situated on the eastern side of the Arabian Gulf; however, it has been satisfactorily proved, by the authors of the Universal History, and by Michaëlis, that many of these passages require a different version, and prove that the land of Cush was Ethiopia. I must refer the reader for further details on this subject to Bochart's *Geographia Sacra*, Michaëlis's *Specimen Geograph. Hebræor. Exteræ*, and the 18th volume of the *Universal History*.

† *Odys.* i. v. 23.—See observations on this passage in Dr. Vincent's *Periplus of the Erythrean sea*, page 10; and in Pope's *Notes on the Odyssey*, v. 23, book i.

different races inhabiting this part of Africa; I shall then inquire, of which among these races the old Ethiopians were the ancestors.

The preceding observations are sufficient to prove that the Ethiopians were a very ancient nation of Africa, and entirely distinct from the Habesh, with whom they have sometimes been confounded; that they were in fact the people termed Cush by the Hebrew historians, and set down by Moses in the Toldoth Beni Noach, as the near kindred of the Mizraim or Egyptians.

SECTION III.

Enumeration of the different Races of People in the Empires of Abyssinia and Ethiopia.

It is now time to enumerate the various descriptions and races of people who are spread over the countries within the limits of these two renowned empires, namely over all the vast regions which extend from the boundary where the dominion of the Negush terminated towards the south, to the confines of Egypt or the meridian of Syene. Between these limits are to be found great varieties of climate, soil, and local situation. There are ranges of mountains containing elevated and cold districts; there are dry, sandy deserts in some parts, and in others, especially to the south-west, woody valleys, abounding with luxuriant vegetation, subject to floods from tropical rains, and divided from each other by ranges of high mountains. In this region there are races of people dif-

fering from each other in many particulars, and scarcely resembling in any respect except in the dusky complexion, which in various shades is common to them all. They may be classed according to their physical characters under the following divisions.

1. Tribes of black woolly-headed negroes inhabit several countries in the eastern parts of Abyssinia. These are mostly pagans and naked savages, who live on the produce of hunting, or on the spontaneous fruits of the earth, and dwell in caves, or under trees. The tribes of this description on the borders of Habesh are termed Shankala or Shangalla.

2. There are other tribes of a red or copper colour, and varying from that hue to a reddish black. Their hair is not woolly, but in general short and bushy, curling in tufts more or less crisp; in some instances more approaching to the hair of Europeans. Their features have a peculiar cast, displaying what may be termed an African character, though in a much less degree than those of Negroes. To this class belong the Barábra or Nubian race, and several other nations.

3. There are other nations living in the empire of Abyssinia, who in figure, stature, and features, nearly resemble Europeans, with complexions of an olive tint verging to black. Of this class are the Amaaras, or native Abyssinians. The hair of these tribes is curled, and bushy, and generally somewhat crisp. There are indeed some tribes of people in this part of Africa with straight or flowing hair; but I suspect that these are not to be

included among the African nations, but are emigrants from Arabia.

4. To the preceding must be added the race termed Galla, who came from the south, and from the unknown countries of the interior. They are little known. Bruce says they have straight hair, and a form like the European. He assures us that their complexion varies; that in low and hot valleys they are black, but that some tribes are of a light brown, or even of a white colour.

We shall describe some of the races now enumerated more particularly.

SECTION IV.

Of the Shangalla, and other Negro Tribes in Abyssinia and Nubia.

THE Shangalla, or Negroes of Abyssinia, are described by Mr. Bruce, in his history of Yasous the Great, and Oustas the Usurper.* They are said to be Troglodytes, but live half the year under the branches of trees, and feed on the flesh of the elephant and hippopotamus, of ostriches and lizards. According to Bruce they still agree with the description of Ptolemy, who classed the natives of these countries under the terms of Rhizophagi, Elephantophagi, Acridophagi, Struthiophagi, and Agriophagi. The same people are exactly described by Diodorus, who professed to derive his account of them from Ethiopian ambassadors, and from other well-informed persons. He says, there

* Bruce's Travels, vol. ii. Abyssinian Annals.

are innumerable tribes of savage Troglodytes, inhabiting the banks and islands of the Nile, and other districts in Ethiopia, who are quite naked and barbarous in their manners, but mild in their dispositions. Most of them,* especially those dwelling on the river, are of black complexion, are flat-nosed, and woolly-haired." Bruce says, the Shangalla of Geesa, and Wambarea, are woolly-haired and of the deepest black, very tall and strong, straighter, and better made about the legs and joints than other blacks; their foreheads are narrow and their cheek-bones high, their noses flat, with wide mouths and very small eyes; he adds, that they have an air of cheerfulness and gaiety.

The same traveller remarks, that the Shangalla have many wives; that their women are very prolific, and bring forth their children with great ease, and never rest or confine themselves after delivery. He says, they are divided into many separate tribes or nations; but adds, that they all speak one language, which is of very guttural pronunciation. On this subject it may be doubted, whether Bruce's information was very correct.

There is another negro nation on the Nile, which are now in possession of Sennaar, where they style themselves Funge, or conquerors. These people are a branch of the Shilluk, whom we have already

* Bruce's Travels, vol. ii. p. 438, *et seqq.* and p. 549, *et seq.* Diodorus terms them, ταῖς χροαῖς μέλανις, ταῖς ἰδίαις σιμοῖ, τοῖς δὲ τριχόμασιν ἔλτοι. See Diod. Bibl. lib. 3.

mentioned among the nations of the interior of Africa.

SECTION V.

Of the Red or Copper-coloured Races.

IN the countries above Darfour, and to the westward of Abyssinia, there are, as we have observed, scattered among the Negro countries, tribes of a dark-red colour, chiefly inhabiting mountainous and woody districts. Similar races are spread over the deserts of Nubia.

The slaves from Darkulla, a country to the south-west of Darfour, are according to Mr. Brown of this description.*

Among these races also are the natives of the mountainous tract of Harraza, where Bruce places the Nouba.†

To the same description of people belong some of the mountaineer tribes within the province of Abyssinia.‡

I shall lay before the reader a full description of some races of men belonging to this department of our species. I begin with the Berberins, Barabra, or Nubians of the Nile, who are better known than the others.

* Brown's Travels to Darfûr, p. 165.

† See Bruce's Map, and Brown's Travels, *loc. cit. supra.*

‡ The Agows, who are savages living near the source of the Abyssinian Nile, as well as the Falasha, or aborigines of the country around lake Dembea, are said to be red or copper-coloured people. See Murray's Appendices to Bruce.

¶ 1.—Of the Nubæ.

THESE people are mentioned by Cosmas Indicopleustes under the title of Βαββαιοι, a name which occurs also in the Periplus of the Erythrean sea. They have often been confounded with the Berbers of Mount Atlas and the north of Africa. Of late we have had many accounts of them from travellers in Egypt and Nubia.*

They are thus described by M. Costaz, who was at Philæ in 1799:† “The Nubians are neither Arabs, Negroes, nor Egyptians; they form a distinct race, with a peculiar physiognomy and colour, and speak a language peculiar to themselves, in which they are called Barábras. Wherever there is any soil on the banks of the Nile, they plant date-trees, establish their wheels for irrigation, and sow a kind of millet called dourah, and also some leguminous plants. Their trade consists

* Dr. Seetzen wrote a treatise on the Barábra nation, inserted in the *Mines de l'Orient*, which I have not seen. It seems that he connected the Barábras with the Berbers of Mount Atlas. He collected vocabularies of their language, which were examined in MS. by Professor Vater, who compared the words of the Nubian vocabulary with specimens of the language of the Berbers, without being able to discover any well marked affinity. See Mithridates Drit. theil. s. 129. It does not appear that there is any other proof of connexion between the Barábras and the Berbers, except the names, which may be an accidental coincidence.

† Description de l'Égypte, par M. Costaz, État Moderne, tom. i. Cited by Mr. Legh, in his travels in Egypt and Nubia, p. 98.

chiefly in cloth, which they buy at Esne, giving in exchange dry dates. The Barábras were in 1779 under the nominal dominion of the Turks, and paid an annual tribute of dates and black slaves, which latter they procured from the caravans of Sennaar. They are in the habit of coming down into Egypt in search of employ, and are known at Cairo under the name of Berberins. They are much prized for their honesty, in which they differ much from the Arabs their neighbours."

Dénon has described them in his lively and characteristic manner. He says, "their skin is of a shining and jetty black, exactly similar to that of antique bronzes. They have not the smallest resemblance to the Negroes in the western parts of Africa. Their eyes are deep set and sparkling; with the brows hanging over, the nose pointed; the nostrils are large, the mouth wide, the lips of moderate thickness, and the hair and beard in small quantity, and hanging in little locks. Being wrinkled betimes, and retaining their agility to the last, the only indication of old age among them, is the whiteness of their beard; every part of the body remaining slender and muscular, as in their youth."*

We may observe here, that although Dénon terms the complexion of the Barabras a jetty black, other travellers have seen them of a much redder hue, and it seems as if their colour varied from a cop-

* Dénon, *Voy. à Egypte*, i. p. 48. Aikin's translation.

perly tint to a darker shade. The accurate English traveller Mr. Brown observes, that the Nubian race commences at Assouan, or Syene. In the island of Elephantine, the people are black, but in the opposite town of Assouan, "they are," he says, "of a red colour, and have the features of the Nubians or Barábras, whose language they readily speak."

The following account of the same people is taken from the Description de l'Egypte, by the French Institute.*

"La couleur des Barábrás tient en quelque sorte le milieu entre le noir d'ébène des habitans de Sennaar et le teint basané des Egyptiens du Sayd. Elle est exactement semblable à celle de l'acajou poli foncé. Les Barábrás se prévalent de cette nuance pour se ranger parmi les blancs."—"Les traits des Barabrás se rapprochent effectivement plus de ceux des Européens que de ceux des Nègres: leur peau est d'un tissu extrêmement fin: sa couleur ne produit point un effet désagréable: la nuance rouge qui y est mêlée, leur donne un air de santé et de vie."

"Ils diffèrent des Nègres par leurs cheveux, qui sont longs et légèrement crépus sans être laineux. J'ai remarqué plusieurs enfans dont la chevelure était mélangée de touffes noirs et de touffes blondes: mais la nuance de ce blond n'est pas la même que celles des Européens: elle se rapproche

* Description de l'Egypte, tom. i. p. 402. Mém. sur les Barabrás.

beaucoup de la couleur de cheveux roussés par le feu : rien n'annonce cependant qu'elle ait été produite artificiellement."

Burckhardt informs us that the people between Syene and Dongola divide their country into two districts, which they call Wady el Kenous and Wady Nouba. The inhabitants speak different dialects of one language, of which specimens are in Burckhardt's work. They are both known in Egypt by the name of Berábera, probably derived from the country called Berber, which is in the direction of Bruce's Goos.

"The people of Berber," says Burckhardt, "are a very handsome race. The native colour seems to be a *dark red brown*, which, if the mother is a slave from Abyssinia, becomes a light brown in the children, and if from the Negro countries, extremely dark. The men are somewhat taller than the Egyptians, and are much stronger, and longer limbed. Their features are not at all those of the Negro, the face being oval, the nose often perfectly Grecian, and the cheek-bones not prominent. The upper lip is, however, generally somewhat thicker than is considered beautiful among northern nations, though it is still far from the Negro lip. Their legs and feet are well formed, which is seldom the case with Negroes. They have a short beard; their hair is bushy and strong, but not woolly: it lies in close curls when short, and, when permitted to grow, forms itself into broad high tufts. They disdain the name of Negroes, and can only be

classed among them by persons who judge from colour alone.

With this description of the Barabra or genuine Nubians, we may compare the account given by the same intelligent traveller, of a particular class of people who are brought as slaves from various countries to the southward of Nubia, from among the Negro nations, and which yet form a description of men distinguished by physical characters from the genuine Negroes. They are all known by the term Nouba. Burckhardt says, "the name of Nouba is given to all the blacks coming from the slave-countries to the south of Sennaar." He adds that the Nouba distinguish themselves from Negroes, among other circumstances, by the softness of their skin, which is smooth, while the palm of the hand in the true Negro feels like wood.* He says, "their noses are less flat than those of the Negroes; their lips are less thick, and their cheek-bones not so prominent. Their hair is generally similar to that of Europeans, but stronger, and always curled; sometimes it is woolly. Their colour is less dark than that of the Negro, and has a coppery tinge."† These remarks prove, that the nations from whom the slaves termed Nouba are brought, are tribes of a description similar to that of the Barabra on the Nile.

It appears from the preceding descriptions that the Nubian or Barabra nations belong to those red or copper-coloured races which, as we have

* Burckhardt's Travels, p. 217.

† Ibid. p. 312.

before observed, are scattered in various parts of Africa, among the negro or black nations. They mark in their features and in the texture of their hair, a certain approximation to the characters of the Negro, though they are yet far from them.

This complexion of the Barabra seems to be of different shades, from the jet black to a coppery brown; the hair, though not woolly, is crisp and curled, like that of the Amaaras and most native African races.

Of the Bedjas and their descendants, the Ababde and Bisharein.

The countries between Egypt and Abyssinia were, in the middle ages, divided between the Nubians already described; and another numerous and formerly powerful nation, called Bedjas. The latter were a nomadic people, who were in possession of the gold, silver, and emerald mines of the Desert. They are mentioned by many old geographers; but the best account of them is in the Arabian Macrizi's Description of Egypt, of which Mr. Burckhardt has furnished us with some extracts.

Macrizi described the Bedjas as living under tents of hair:—He says, “their colour is darker than that of the Habesh: they have the manners of Arabs; they have no towns, no villages, no fields. Their provisions are carried to them from Egypt, and Habesh, and Nouba. They were formerly ido-

latrous, and then took the Islam.—They are hospitable and charitable people; they are divided into tribes and branches, every one of which has its chief. They are pastors, and live entirely on flesh and milk.*

According to Macrizi, the Bedjas, intermixed with Arabs, were the ancestors of the Ababdé and Bisharein, two nations of wandering shepherds or Bedouins, who now occupy nearly the same country. The Ababdé are to the northward of the Bisharein, occupying the deserts eastward of Egypt to the Red Sea as far as the northern limits of the Bisharein. The latter begin about the Atbara, are in possession of Taka, and all the districts thence as far southward as Abyssinia.

Both of these nations belong to the class of red or copper-coloured people.

The only good account I have seen of the Ababdé race, is in the travels of the ingenious and enterprising Belzoni.

These people extend from the neighbourhood of Suez to the country inhabited by the Bisharein, on the coast of the Red Sea, below the latitude of 23°. They live among solitary rocks and deserts, and feed chiefly on dhourra. “ They are all nearly naked, badly made, and of small stature. They have fine eyes, particularly the women, as far as we could see, of those that came to the wells. The married women are covered, the rest uncovered, Their head-dresses are very curious. Some are

* Extracts from Macrizi, by Burckhardt, p. 510.

proud of having their hair long enough to reach below their ears, and then formed into curls, which are so entangled and matted with grease that it cannot be combed." He adds, that "as their hair is very crisp, their heads remain dressed for a long time; and that they may not derange their coëffure, when their heads itch, they have a piece of wood something like a packing needle, with which they scratch themselves with great ease without disordering their head-dress." "Their complexions are naturally of a dark chocolate; their hair quite black; their teeth fine and white, protuberant and very large."*

The Bisharein are described by Burckhardt, who collected a copious vocabulary of their language. He says, "the inhospitable character of the Bisharein would alone prove them to be a true African race, were it not put beyond all doubt by their language."† For a full account of the manners of this nomadic people, I must refer the reader to the intelligent traveller above-mentioned, who had opportunities of becoming thoroughly acquainted with them. Some interesting particulars respecting them have been reported by Mr. Hamilton.‡

Burckhardt says, "the Bisharein of Atbara, like all their brethren, are a handsome and bold race of

* Belzoni's Travels, p. 310. † Travels in Nubia, p. 372.

‡ Hamilton's *Ægyptiaca*. According to Mr. Hamilton they are said to eat live flesh, and speak with pleasure of the luxury of opening the veins of sheep or dromedaries, and drinking the warm blood.

people; they go constantly armed, and are seldom free from quarrels."—"Their dress, or rather undress, was every where the same, consisting only of a dammour shirt, worn by both men and women. I thought the latter remarkably handsome; they were of a *dark brown* complexion, with beautiful eyes and fine teeth; their persons were slender and elegant."

SECTION VI.

Physical Characters of the Abyssinians.

THE Abyssinians are of a black, or dark olive colour approaching to black, but of fine form and handsome features. "The Habessines," says Tellez, "are remarkable for the complete shape of their bodies, of a due procerity, free and cheerful countenance, and thin nosed, that is, not flat nosed, nor blubber-lipped, so that our Europeans excel them only in colour, in other perfections of proportion they differ little or nothing. They are generally black, which they most admire: some are ruddy complexioned, some few white, or rather pale and wan, without any grace or well-favouredness.* The celebrated Abyssin Abba Gregorius informed Ludolph, that their children are not born black, but very red, and in a short time turn black. Burckhardt says, that the Abyssinian women are the most beautiful of all black women, and the most affectionate to their masters.† It seems that

* Tellez, cited by Ludolph, transl. p. 70.

† Ludolph, p. 71.

the Amaara are of a complexion somewhat lighter than the people of Tigré, though the latter are descended from the Agaazi, who are of Arabian extraction.* Mr. Salt says, the natives of Dixan are of a very deep hue, few of them having any claim to the term of copper-coloured bestowed on them by Bruce. Bruce says that the Shepherds, as he chooses to term the Agaazi, were a nation of long-haired people, of very dusky and dark complexion; but of European features, and in nothing like the Negro.† But it appears that the Amaara, though their features are well formed, have the hair somewhat frizzled or crisp, though in a less degree than what is commonly termed woolly hair, or than the hair of the Negroes of Guinea. The famous Abba Gregorius, the friend of Ludolph, was of a genuine Amaaric family. Ludolph says of him, that he had crisp hair like the rest of his countrymen.‡

SECTION VII.

Of the Copts.

IN order to complete the description of the native races of this part of Africa, we have now only to mention the Copts, who are well known to be

* Burckhardt's Travels in Nubia, p. 311.

† Murray's Appendix to Bruce on the Nations of Abyssinia.

‡ "Crispos capillos et cæteri Æthiopes habebat." Blumenbach says, "Das so genannte woolkaar findet sich bey manchen Abyssiniern, wie. z. b. bey dem berühmten Abba Gregorius. *Beiträge*, 87."

the descendants of the old Egyptians.* That the Egyptian race remained nearly unaltered in the interior and remote parts of the country, may be inferred from the preservation of their language, which was extant in its three dialects, with a slight admixture of Greek words, until the era of the conquest of Egypt by the Moslemin; and subsequently to that event, the Christian population has been preserved by obvious causes from intercourse with strangers. Among the modern Copts many travellers have remarked a certain approximation to the Negro. Volney says, that they have a yellowish dusky complexion, neither resembling the Grecian nor Arabian. "He adds that they have a puffed visage, swollen eyes, flat noses and thick lips, and bear much resemblance to Mulattoes." Baron Larrey has written a treatise expressly on the physical conformation of the Egyptians. He thus describes the Copts, or as he chooses to term them, the *Qobtes*.† *Tous les Qobtes ont un ton de peau jaunâtre et fumeux comme les Abyssins; leur visage est plein, sans être bouffé; leurs yeux sont beaux, limpides, coupés en amande et d'un regard languissant: les pommettes sont saillantes; le nez est presque droit, arrondi à son sommet; les narines sont dilatées; la bouche moyenne; les lèvres épaisses; les dents*

* This has been clearly proved by Jablonski, Lacroze, Quatremère.

† Description de l'Egypte.

blanches, symmetriques, et peu saillantes ; la barbe et les cheveux noirs et crépeux."

M. Dénon says he was struck with the resemblance of the Copts to the old Egyptian sculptures, characterised by "*flat foreheads, eyes half-closed and raised up at the angles, high cheek-bones, a broad flat nose, very short, a large flattened mouth placed at a considerable distance from the nose, thick lips, little beard, a shapeless body, crooked legs, without any expression in the contour, and long flat toes.*"

Mr. Ledyard, whose testimony is of the more value, as he had no theory to support, says, "I suspect the Copts to have been the origin of the Negro race; the nose and lips correspond with those of the Negro. The hair, whenever I can see it among the people here, (the Copts) is curled; not like that of the Negroes, but like the Mulattoes."

It seems that the complexion of the Copts is liable to considerable variations. Though it must be true, as M. Larrey asserts in the passage above cited, that the Copts are generally of a dusky and yellowish colour like the Abyssins, yet we are assured by Mr. Belzoni, that some of them are nearly as fair as Europeans.†

* Ledyard's Observations, in the Reports of the African Association.

† Belzoni's Travels, p. 239.

SECTION VIII.

Physical Characters of the old Ethiopians.

THERE is no people so important with respect to the ancient history of the African nations, as that remarkable race, whose vestiges still remain in the ruins of temples and pyramids on the Nile, from Meroë to the Delta; I mean the people who were termed beyond the cataracts Æthiopes, and lower down than Syene, Egyptians: for the voice of all antiquity declares these nations to have been branches of one race. It is only through the medium of this race that we find any point of union between the otherwise insulated aborigines of Africa, and the nations of Asia and the rest of the world. I shall therefore be excused for entering somewhat fully into an inquiry respecting the physical history of this people.

I shall first inquire who are the descendants of the Ethiopians, among the various races enumerated in the preceding sections of this chapter, and what sort of people they were.

The Greeks commonly used the term Ethiopians nearly as we use that of Negro: they constantly spoke of the Ethiopians as we speak of the Negroes, as if they were the blackest people known in the world. "*To wash the Ethiopian white,*" was a proverbial expression, applied to a hopeless attempt. It may be thought that the term Ethiopian was perhaps used vaguely, to signify all or many African nations of dark colour, and that the

genuine Ethiopian may not have been quite so black as others. But it must be observed, that though other black nations may be called by that name when taken in a wider sense, this can only have happened in consequence of their resemblance to those from whom the term originated. It is improbable that the Ethiopians were destitute of a particular character, the possession of which was the very reason why other nations participated in their name, and came to be confounded with them. And the most accurate writers, as Strabo, for example, apply the term Ethiopian in the same way. Strabo, in the 15th book, cites the opinion of Theodectes, who attributed to the vicinity of the sun, the black colour and woolly hair of the Ethiopians.* Herodotus expressly affirms, that the Ethiopians of the west, that is, of Africa, have the most woolly hair of all nations; in this respect, he says, they differed from the Indians and eastern Ethiopians, who were likewise black, but had straight hair. Moreover the Hebrews, who in consequence of their intercourse with Egypt under the Pharaohs, could not fail to know the proper application of the national term Cush, seem to have had a proverbial expression similar to that of the Greeks, "Can the Cush change his colour, or the leopard his spots."† This is sufficient to prove

* Τοῦ μέλανος εἶναι καὶ οὐλοτέρας τοὺς Αἰθίοπας τῇ αἰτίᾳ, κ. τ. λ.

† Jeremiah, xiii. 23.

that the Ethiopian was the darkest race of people known to the Greeks, and in earlier times to the Hebrews.

The only way of avoiding the inference, that the Ethiopians were genuine Negroes, must be by the supposition that the ancients, among whom the foregoing expressions were current, were not acquainted with any people exactly resembling the natives of Guinea, and therefore applied the terms woolly-haired, flat-nosed, &c. to nations who had these characters in a much less degree than those people whom we now term Negroes.

It seems possible that the people termed Ethiopians by the Greeks, and Cush by the Hebrew writers, may either have been of the race of the Shangalla, Shilluk, or other Negro tribes, who now inhabit the countries bordering on the Nile to the southward of Sennaar, or they may have been the ancestors of the present Nouba or Barabra, or of people resembling them in description.

The chief obstacle to our adopting the supposition, that these Ethiopians were of the Shangalla race, or of any stock resembling them, is the circumstance, that so near a connexion appears to have subsisted between the former and the Egyptian; and we know that the Egyptians were not genuine Negroes.

The Nouba may be ranked among black races, though of a reddish hue. Burckhardt occasionally terms them blacks, and allows that by colour,

though by that alone, they might almost be ranked among Negroes. Even their hair and features are such, that we have no great difficulty in imagining the application to them of those terms, which we have seen to have been applied to the hair and features of the Ethiopians.

The Noubæ, however, are not the descendants of the Ethiopians. For Strabo expressly mentions them as a great nation, inhabiting the country to the left of the Nile, from Meroë to the elbows, or bendings of that river; and distinguishes them from the Ethiopians. He terms them Noubai or Nubæ, and says that they are not subject to the Ethiopians, but are divided into many petty kingdoms.

But the Ababbé and Bisharein, who were described in a former section, are tribes of a similar character though of different race. They are said to be the descendants of the Bedjas, who in the middle ages appear to have been the most numerous and civilized people in this part of Africa. To me it seems probable, that these nations are the posterity of the old Ethiopians, to whose country, and in some degree to whose celebrity, they succeeded. The reader may refer to the description above given of them; and form his own judgment.

as he had travelled in Egypt, and was the well acquainted. Strabo, lib. xvii. p. 786. the appearance of the people; and it is well known that he is in general very accurate and faithful in relating the facts and describing the objects which

SECTION IX.

Of the Complexion and Physical Structure of the ancient Egyptians.

THERE are two sources of information respecting the physical characters of the ancient Egyptians. These are, first, the descriptions of their persons incidentally to be met with in the ancient writers. Secondly, the numerous remains of paintings and sculptures, as well as of human bodies, preserved among the ruins of ancient Egypt. It is not easy to reconcile the evidence derived from these different quarters.

I shall lay before my readers, in as short a compass as possible, the principal data, from which they may form a judgment on this subject.

¶ 1. *Accounts given by the Ancients.*

If we were to judge from the remarks in some passages of the ancient writers alone, we should, perhaps, be led to the opinion that the Egyptians were a woolly-haired, and black people, like the Negroes of Guinea.

There is a well known passage of Herodotus which has been often cited to this purpose. The authority of this historian is of the more weight, as he had travelled in Egypt, and was therefore well acquainted, from his own observation, with the appearance of the people; and it is well known that he is in general very accurate and faithful in relating the facts and describing the objects which

fell under his personal observation. In his account of the people of Colchis, he says that they were a colony of Egyptians, and supports his opinion by this argument, that they were “μελάγχροες καὶ οὐλότριχες,” or, black in complexion and woolly haired.* These are exactly the words used in the description of undoubted negroes.

Herodotus in another place alludes to the dark complexion of the Egyptians, as if it was very strongly marked, and indeed, as if they were quite black.

After relating the fable of the foundation of the Dodonæan oracle by a black dove, which had fled from Thebes in Egypt, and uttered her prophecies from the beech tree at Dodona, he adds his conjecture respecting the true meaning of the tale. He supposes the oracle to have been instituted by a female captive from the Thebaid, who was enigmatically described as a bird, and subjoins, that “by representing the bird as black they marked that the woman was an Egyptian.”†

* The same Colchians are mentioned by Pindar in the fourth Pythian ode as being black, with the epithet of *κελαινώπιαι*.

ήλυθον, ἔνθα κελαι-
νώπεσσι Κόλχοισι βίαν
μίξαν Αἴητα παρ' αὐτῶν

On which passage the scholiast observes, that the Colchians were black, and that their dusky hue was attributed to their descent from the Egyptians, who were of the same complexion.

v. 376.

† Herod. lib. ii.

Some other writers have left us expressions equally strong. Æschylus in the *Supplikes*, mentions the crew of the Egyptian bark, as seen from an eminence on shore; the person who espies them concludes them to be Egyptians, from their black complexion.

“πρέπουσι δ' ἄνδρες νηιοὶ μελαγχίμοις

γυίοισι λευκῶν ἐκ πέπλωμάτων ἰδεῖν.”

“The sailors too I marked,
Conspicuous in white robes their sable limbs.”

There are other passages in ancient writers in which the Egyptians are mentioned as a swarthy people, which might with equal propriety be applied to a perfect black or to a brown or dusky Nubian.

We have in one of the dialogues of Lucian, a ludicrous description of a young Egyptian who was represented as belonging to the crew of a trading vessel at the Piræus. It is said of him that “besides being black, he had projecting lips, and was very slender in the legs, and that his hair and the curls bushed up behind, marked him to be of servile rank.”† The expression, however, applied to the hair, seems rather to agree with the de-

* Æschylus in *Suppl.*

He applies the same epithet to them again:

ἐπλευσαν δ' ὡς ἐπιτυχεὶ κότῳ,

πόλει μελαγχίμῳ σὺν στρατῷ.

† Lucian. *Navigatio seu Vota*. The original words are:

“Οὗτος δὲ, πρὸς τῷ μελαγχρῶς εἶναι, καὶ προχειλὸς ἐστὶ δὲ καὶ λεπτός ἄγαν τοῖν σκελοῖν,” — “ἡ κόμη δὲ καὶ εἰς τὸν πῖσω ὁ πλόκαμος σὺν-
εσπειραμένος οὐκ ἰλευθερὸν φησιν αὐτὸν εἶναι.”

scription of the bushy curls worn by the Noubathan with the woolly heads of negroes. Mr. Legh in speaking of the Barabras, near Syene, says, "The hair of the men is sometimes frizzled at the sides, and stiffened with grease, so as perfectly to resemble the extraordinary projection on the head of the Sphinx. But the make of the limbs corresponds with the negro."*

In another physical peculiarity the Egyptian race is described as resembling the Negro. Ælian informs us, that the Egyptians used to boast that their women immediately after they were delivered, could rise from their beds, and go about their domestic labour.†

Some of these passages are very strongly expressed, as if the Egyptians were negroes, and yet it must be confessed, that if they really were such, it is singular that we do not find more frequent allusion to the fact.‡ The Hebrews were a fair

* Legh's Travels in Egypt, p. 98. The same method of dressing the hair by frizzling it out at the sides, appears in Egyptian paintings. See Mr. Hamilton's interesting account of the paintings of an agricultural scene at Eleithias in Upper Egypt, p. 97, Mr. Hamilton's *Ægyptiaca*.

† Ælian, de Animal. lib. vii. cap. 12.

‡ Ammianus Marcellinus describes the Egyptians, lib. xxii.

Firmus, an Egyptian chief described by Vopiscus, called Cyclops from his dark, black face. Q. Was he an Egyptian? He is said to have been a native of Seleucia. See also Jac. Bryant, vol. iii. p. 298.

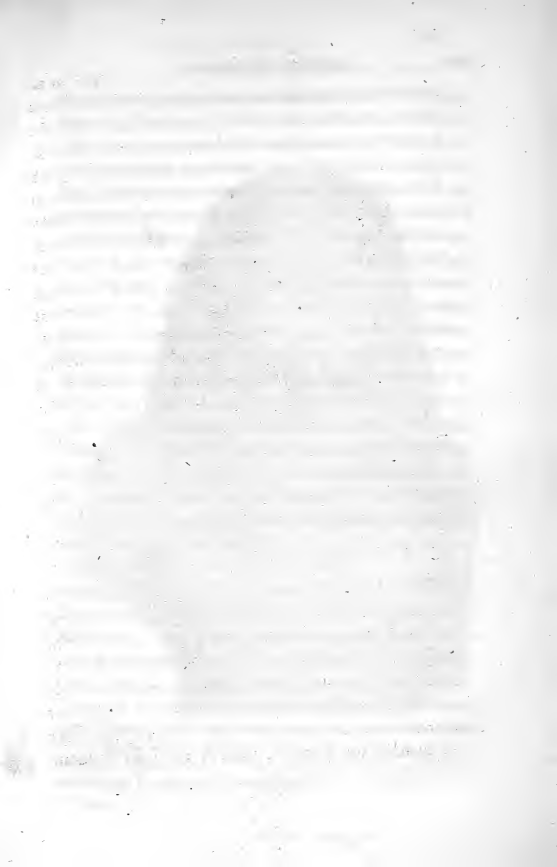
† This remark has been made by Mr. Brown; see his travels in Africa.

people, fairer at least than the Arabs. Yet in all the intercourse they had with Egypt, we never find in the sacred history, the least intimation that the Egyptians were negroes; not even on the remarkable occasion of the marriage of Solomon with Pharoah's daughter. Were a modern historian to record the nuptials of an European monarch with the daughter of a Negro king, such a circumstance would surely find its place. And since Egypt was so closely connected first with Grecian affairs when under the Ptolemies, and afterwards with the rest of Europe when it had become a Roman province, it is very singular, on the supposition that this nation was so remarkably different from the rest of mankind, that we have no allusion to it. We seldom find the Egyptians spoken of as a very peculiar race of men.

These circumstances induce us to hesitate in explaining the expressions of the ancients in that very strong sense in which they at first strike us.

¶ 2. *Paintings in Temples, and other remains.*

If we may judge of the complexion of the ancient Egyptians from the numerous paintings found in the recesses of temples and in the tombs of the kings in Upper Egypt, in which the colours are preserved in a very fresh state, we must conclude that the general complexion of this people was a chocolate, or a red copper colour. This may be seen in the coloured figures given by Belzoni,





Egyptian Statue.

and in numerous plates in the splendid "*Description de l'Egypte*." This red colour is evidently intended to represent the complexion of the people, and is not put on in the want of a lighter paint or flesh colour; for when the limbs or bodies are represented as seen through a thin veil, the tint used resembles the complexion of Europeans. The same shade might have been generally adopted if a darker one had not been preferred, as more truly representing the natural complexion of the Egyptian race.* Female figures are sometimes distinguished by a yellow or tawny colour, and hence it is probable that the shade of complexion was lighter in those who were protected from the sun.

A very curious circumstance in the paintings found in Egyptian temples remains to be noticed. Besides the red figures, which are evidently meant to represent the Egyptians, there are other figures which are of a black colour. Sometimes these represent captives or slaves, perhaps from the negro countries; but there are also other paintings of a very different kind, which occur chiefly in Upper Egypt, and particularly at the confines of Egypt and Ethiopia. In these the black and the red figures hold a singular relation to each other. Both have

* See Belzoni's Remarks, p. 239.

See tom. ii. of the *Description de l'Egypte*; in plate 47, figure 12, is a good representation of the physical characters of the Egyptian race, having the full cheeks and peculiar expression. Plate 90, fig. 1, and plate 91, fig. 1, display the red coppery complexion of the Egyptians.

the Egyptian costume and the habits of priests: the black figures are represented as conferring on the red the instruments and symbols of the sacerdotal office. "This singular representation," says Mr. Hamilton, "which is often repeated in all the Egyptian temples, but only here at Philæ and at Elephantine with this distinction of colour, may very naturally be supposed to commemorate the transmission of religious fables and the social institutions from the tawny Ethiopians to the comparatively fair Egyptians." It consists of three priests, two of whom with black faces and hands, are represented as pouring from two jars strings of alternate sceptres of Osiris and *cruces ansatæ* over the head of another whose face is red. There are other paintings which seem to be nearly of the same purport. In the temple of Philæ, the sculptures frequently depict two persons who equally represent the characters and symbols of Osiris, and two persons equally answering to those of Isis; but in both cases one is invariably much older than the other, and appears to be the superior divinity. Mr. Hamilton conjectures that such figures represent the communication of religious rites from Ethiopia to Egypt, and the inferiority of the Egyptian Osiris. In these delineations there is a very marked and positive distinction between the black figures and those of fairer complexion; the former are most frequently conferring the symbols of divinity and sovereignty on the latter.

Besides these paintings described by Mr. Hamilton there are frequent repetitions of a very singular representation, of which different examples may be seen in the beautiful plates of the "*Description de l'Egypte*." In these it is plain that the idea meant to be conveyed can be nothing else than this, that the red Egyptians were connected by kindred, and in fact were the descendants of a black race, probably the Ethiopian.*

¶ 3. *Form of the Skull.*

In reference to the form of the skull among the ancient Egyptians, and their osteological characters in general, there is no want of information. The innumerable mummies, in which the whole nation may be said to have remained entire to

* Plate 92, (also pl. 84 and 86, contain instances of this sort), "In hac stant tres virorum effigies, recurvato corpore, ὀρθῶς ἔχοντες τὸ αἰδοῖον καὶ σπέρμα ἄνω προβάλλοντες; ubi decedit humi, nascitur ex terra homo. Qui gignuntur, colore rubro sunt; parenter nigerrimi."

Observations are to be found to the same purport in a work by M. Pugnet, entitled "*Mémoires sur les fièvres de mauvais caractère du Levant, avec un aperçu physique et médical du Sayd*." The author describes some painting in the *Tombs of the Kings*.

In the same tome of the *Description de l'Egypte* is a plate representing a painting at Eilithyia. Numerous figures of the people are seen. It is remarkable that their hair is black and curled. "Les cheveux noirs et frisés, sans être courts et crépus comme ceux des Nègres." This is probably a correct account of the hair of the Egyptian race.

modern times, afford sufficient means of ascertaining the true form of the race and all its varieties.

Blumenbach, who has collected much information on every thing relating to the history of mummies in his excellent "*Beyträge zur Naturgeschichte*," concludes with a remark, that the Egyptian race, in his opinion contained three varieties. These are,

1. The Ethiopian form,
2. The Hindus-artige, or a figure resembling the Hindoos.

3. The Berber-ähnliche. He should rather have said, Berberin-ähnliche, a form similar to that of the Berberins already mentioned.

We must, however, take notice that Blumenbach has been led to adopt this opinion, not so much from the mummies he has examined, as from the remains of ancient art and from historical testimonies. We shall return to his conclusions, after considering the facts on which they are founded.

As far as their osteological characters are concerned, it does not appear that the Egyptians differed very materially from Europeans. They certainly had not the characters of the skull which belong to the Negroes in the western parts of Africa, and if any approximation to the negro skull existed among them, it must have been rare and in no great degree.

Sömmerring has described the heads of four mummies seen by him; two of them differed in



Head of an Egyptian Mummy.

nothing from the European formation; the third had only one African character, viz. that of a larger space marked out for the temporal muscle;* the characters of the fourth are not particularized.

Mr. Lawrence, in whose work the above evidence of Sömmerring is cited, has collected a variety of statements respecting the form of the head in the mummies deposited in the museums and other collections in several countries. He observes that in the mummies of females seen by Dénon, in those from the Theban catacombs engraved in the great French work, and in several skulls and casts in the possession of Dr. Leach, the osteological character is entirely European; lastly, he adduces the strong evidence of Cuvier, who says, that he has examined in Paris, and in the various collections of Europe, more than fifty heads of mummies, and that not one among them presented the characters of the Negro or Hottentot.†

It could, therefore, be only in the features, as far as they depend on the soft parts, that the Egyptians bore any considerable resemblance to

* “Formam Africanam, alte progredienti vestigio insitionis musculi temporalis, repræsentat.” But he adds, “Vertex non est compressus, neque ossa faciei robustiora sunt ossibus Europæorum.” Soemmerring de Corp. h. Fabrica.

† Observations sur le cadavre de la Vénus Hottentotte, par M. Cuvier. Mém. du Muséum d’Hist. Nat. tome iii.

In Plate 4, figure 2, I have given a copy from the drawing of an Egyptian head, contained in the second volume of the “Description de l’Egypte.”

the Negro. And the same thing might probably be affirmed of several other nations who must be reckoned among the native Africans. Particularly it might be asserted of the Berberins or Nubians already mentioned, and of some tribes of Abyssinians. A similar remark might be made of the Copts. In neither of these races is it at all probable that the skull would exhibit any characteristic of the negro. It is here then that we are to look for the nearest representatives of the ancient Egyptians and Ethiopians, and particularly to the Copts, who are descended from the former, and to the copper-coloured races resembling the Berberins or Nubians.

Dénon, whose description of the Copts I have cited above, remarks their resemblance to the human figures painted or sculptured among the ruins of ancient Egypt. He adds the following remarks :

“As to the character of the human figure, as the Egyptians borrowed nothing from other nations, they could only copy from their own, which is rather delicate than fine. The female forms, however, resembled the figures of beautiful women of the present day; round and voluptuous; a small nose, the eyes long, half shut and turned up at the outer angle, like those of all persons whose sight is habitually fatigued by the burning heat of the sun, or the dazzling whiteness of snow; the cheeks round and rather thick, the lips full, the mouth

large, but cheerful and smiling; displaying, in short, the African character, of which the Negro is the exaggerated picture, though perhaps the original type."

The visages carved and painted on the heads of the sarcophagi may be supposed to give an idea of the Egyptian countenance. In these there is a certain roundness and flatness of the features and the whole countenance, which strongly resembles the description of the Copts, and in some degree that of the Berberins. The colour of these visages is the red coppery hue of the last-mentioned people, and is nearly the same, though not always so dark, as that of the figures painted in the temples and in catacombs.

The most puzzling circumstance in this comparison refers to the hair. The Copts are said to have frizzled or somewhat crisp, though not woolly hair. The Berberins in the preceding descriptions of that people, are said to have curled, bushy hair. The old Egyptians, as well as the Ethiopians, are termed by the Greeks *οὐλοτριχες*. But the hair found in mummies is generally, if not always, in flowing ringlets, as long and smooth as that of any European. Its colour, which is often brown, may depend on art, or on the substances used in embalming. But the texture is different from what we should expect it to be either from the statements of ancient writers, or from the description of the races now existing in the same countries.

¶ 4. Conclusion.

I have laid before the reader the principal facts relating to this subject, from which he can form his own judgment. It will, however, be expected that I should offer my opinion, or point out what inferences appear to me the most probable.

I am inclined to consider it as tolerably well proved, that the Egyptians and Ethiopians were nations of the same race, whose abode from the earliest periods of history were the regions bordering on the Nile. These nations are called in the Scriptures, which contain by far the earliest accounts, Mizraim and Cush, and their country the land of Ham.* They were not negroes, such as the negroes of Guinea, though they bore some resemblance to that description of men, at least when compared with the people of Europe. This resemblance, however, did not extend to the shape of the skull, in any great degree at least, or in the majority of instances. It perhaps only depended on a complexion and physiognomy similar to those of the Copts and Nubians. These races, as may be seen by the preceding descriptions, partake in a certain degree of the African countenance.†

* The Egyptian word for Egypt is *Chemi*, evidently the same word as Cham. It means *black*, a term which had reference more probably to the people than the soil. The name of the patriarch passed upon his black or swarthy posterity.

† This character must be greatly increased, the causes which gave rise to it must have acted with much greater energy, in

The hair in the Ethiopians and Egyptians must sometimes have been of a more crisp or bushy kind than that which is often found in mummies; for such is the case in respect to the Copts, and the descriptions of the Egyptians by all ancient writers oblige us to adopt this conclusion.

In complexion it seems probable that this race was a counterpart of the Foulahs, in the west of Africa, nearly in the same latitude. The blacker Foulahs resemble in complexion the darkest people of the Nile; they are of a deep brown, or mahogany colour. The fairest of the Foulahs are not darker than the Copts, or even than some Europeans. Other instances of as great a variety may be found among the African nations, within the limits of one race, as in the Bishuane Kaffers, who are of a clear brown colour, while the Kaffers of Natal on the coast are of a jet black. From some remarks of Diodorus and Plutarch, it would appear that the birth of fair, and even red-haired individuals, occasionally happened in the Egyptian race.*

In adverting again to Blumenbach's triple division of the Egyptians, we may remark that his second or Indian class, seems rather fancifully constituted, and perhaps some hypothesis respecting the affinity of the Egyptians to the Hindoos, was order to bring forth in the remote branches of this race the characteristics of the African nations in general.

* Diodorus and Plutarch say that Typhon was *ρυγγός*, or red-haired; the former adds that a few of the native Egyptians were of that complexion—*ἐλιγγὺς τινὰς*.

the foundation of it. The other two classes of Ethiopian and Berberin, may express very truly the nature of those variations, which probably existed in the Nilotic race. We must observe that Blumenbach has himself explained the former of these terms to mean, not the Negro character, but something approximating in but a slight degree to that character.

Before we take leave of the Egyptians, it will be necessary to say a few words respecting a peculiarity in the teeth of Egyptian mummies, which has been noticed by Blumenbach. The incisores are thick and round; not, as usual, flattened into edges, but resembling truncated cones; the cuspidati are not pointed, but broad and flat on the masticating surface, like the neighbouring bicuspidates. This seems to be a very frequent character in mummies. It is doubtless attributable in part to mechanical attrition, depending on the nature of the food, which the teeth were constantly employed in masticating. Blumenbach thinks this not altogether sufficient to explain it, and imagines it to depend in part on a natural variety.*

* Blumenbach says, the Egyptian teeth differ widely from those of nations who file them away. "Aber von eben diesen durch die kunstabgeschliffenen zähnen unterscheiden sich jene an den gedachten Mumien schon auf den ersten blick, besonders durch die auffallende stärke und dicke des theils der kronen, der nach den alveolen gekehrt ist."—"Auch von den zähnen, deren kronen beym kauen des nahrungsmittel abgenutzt worden. Daher ich doch immer noch eher vermuthe, dass bey jenen alten Aegyptern auch eine Nationaleigenheit im baue selbst dabey mit zum grunde liegen mag." *Beiträge*, p. 100.

Mr. Lawrence says that he has examined this appearance attentively in Egyptian mummies, and in some other heads in which it occurs, and is fully convinced that it is entirely accidental. I must refer the reader to these authors for more particular information on this subject.*

I have observed a similar appearance in a mummy lately opened. The incisores were worn to mere stumps, which were of course like truncated cones; but, although thick and round, they were not so in such a degree as to indicate, in my opinion, any material variety of the teeth.

* Blumenb. *ubi supra*. Lawrence, p. 385.

CHAPTER VI.

Of the Nations of Southern Africa.

SECTION I.

General Observations.

HAVING completed the survey of the nations who inhabit Northern Africa, I now come to those parts of that peninsula, which lie to the southward of the equator.

It appears that all the nations of Africa as yet known, to the southward of the equator, may be referred with some degree of probability to two races, both of which are divided into many tribes; these are the Hottentots, and the Kaffers, or Caffrarians. Travellers have often spoken of these races as forming two classes of men, and of the Negroes as constituting a third, but there are no exact limits by which the term Negro can be defined, and the class distinguished from the Caffrarian. The Negro nations do not form one particular race connected by language, as the various tribes of Kaffers do, and there are some tribes among the latter people, who have all the characteristic traits ascribed to the Negro.

The Southern African nations agree with the races to the northward of the equator, in having

a dusky complexion and woolly hair. I extract the following general account of them from Mr. Burchell's Travels.

"South Africa," says this enterprising traveller, is peopled by nations evidently of two widely distinct origins. The Hottentot race is separated from all the nations of the globe, by their extraordinary language, instantly known from every other, by the frequent and peculiar clapping noise in its pronunciation. From all their neighbours they are distinguished by a less swarthy skin, a very different cast of features, a smaller stature, and more delicate limbs and figure. The Caffre race, whose language is free from the clapping of the tongue, are characterised by a taller figure, and limbs more robust; by a darker colour, and features more round and large."

"To the Hottentot race are referable the tribes denominated *Bushmen*, the *Namaquas*, and *Koras*, or *Koraguas*, as well as the *Hottentots* proper, who at this day, as they did before the discovery of the land by Europeans, inhabit the Cape colony."

"To the *Caffre* race belong the *Bichuanas*, and the *Dammaras*, together with the *Kosas*, or *Caffres* proper, the *Tamboukis*, and probably all the tribes on the eastern side of the continent, as far as Delagoa Bay."

SECTION II.

Physical Characters of the Hottentots.

THE complexion of the Hottentots is like that of the palest negro, but still more dilute. Dr. Sparrman compared it to that of a person affected with the jaundice. Mr. Barrow observes, that it is very unlike that colour: he says it is of a yellowish brown, or of the hue of a faded leaf. Mr. Burchell says, that the complexion of the whole race of Hottentots is of a tawny buff or fawn colour: such as a painter might imagine that of a Guinea Negro would be, if it were half washed off, and a light tint of ochre put over the remainder.* Their eyes, as Mr. Barrow informs us, are of a deep-chesnut colour.

Sparrman says, the hair of the Hottentots is more woolly than that of the Negroes. It is thus described by Mr. Barrow. "The hair is of a very singular nature: it does not cover the whole surface of the scalp, but grows in small tufts at certain distances from each other, and when clipped short, has the appearance and feel of a hard shoe-brush, except that it is curled and twisted into small round lumps, about the size of a marrow-fat pea. When suffered to grow, it hangs on the neck in hard twisted tassels like fringe."*

Their figure is thus described by Mr. Barrow. "The Hottentots are well proportioned, erect, of delicate and effeminate make: not muscular: their

* Barrow, vol. i.

joints and extremities small; the face generally ugly, but different in different families; some having the nose remarkably flat; others considerably raised. Their eyes are of a deep chesnut colour; long and narrow, distant from each other; the inner angle being rounded, as in the Chinese, to whom the Hottentot bears a striking resemblance. The cheek-bones are high and prominent, and with the narrow pointed chin form nearly a triangle. Their teeth are very white. The women when young are graceful and well made; the nipple is unusually large, and the areola much elevated; but immediately after the birth of the first child the breast becomes flaccid and pendant, and in old age becomes greatly distended; the belly becomes protuberant, and the posteriors are covered with a huge mass of pure fat. That elongation of the nymphæ, which is well known to characterize the Hottentot women, has been falsely ascribed to art. It is a natural variety of conformation.

Mr. Burchell states the following characters as peculiar to the Hottentots. Hands and feet little; eyes so oblique that lines drawn through the corners of each, would not coincide as being on the same plane, but would intersect as low down as the middle of the nose. Space between the two cheek-bones flat; scarcely any perceptible ridge of the nose; end of nose wide and depressed; nostrils squeezed out of shape; chin long and forward; narrowness of the lower part of face, a character of the race.

¶ 2. *Of the Bosjesmans or Bushmen.*

THE Bushmen are a very peculiar race of men. They are tribes, or rather banditti of savage robbers, who live among the rocks and woods on the northern frontier of the colony, and support themselves by depredation. They give themselves the national appellation of Saabs.

Lichtenstein had no hesitation in declaring the Bushmen to be a different race from the Hottentots. He founded this opinion on the difference of their language, which is unintelligible to the Hottentots. There is however sufficient resemblance, when the vocabularies of these nations are carefully compared, to lead to a different conclusion.* By all other travellers the Bushmen are regarded as of Hottentot race, though very much degenerated and reduced to the lowest stage of physical and moral degradation.

Physical Character of the Bushmen.

ALL the physical characters of the Hottentots are recognised in the Bushmen. In the latter people all the deformities of the race are seen in an exaggerated degree; they are extremely ugly and diminutive; the middle size of the men being four feet six inches, and that of the women four feet.† Their flat nose, high cheek-bones, prominent chin, and concave visage, give them much of the apish character, which is increased by their

* Vater in Mithridat. th. 3. † Barrow's Travels, p. 276-7.

keen, vivid eye, always on the alert; they spring from rock to rock with the activity of antelopes; sleep in nests, which they form for themselves in bushes, just like bird-nests, but seldom pass two nights in one place. They live by depredation, or by catching wild animals, such as serpents, lizards, ants, and grasshoppers.*

"The universally distinguishing features of the Hottentot, the broad flat nose, and the large prominent cheek-bones, are, from the leanness of the Bosjesmans, doubly remarkable."

"The loose, pendent breasts, the disproportionate thickness of the hinder parts, where, as in the tails of the African sheep, the whole fat of the body seems collected, united with the ugliness of their features, make a Bosjesman woman, in the eyes of an European, a real object of horror."†

Cuvier has given some valuable information on the anatomical peculiarities of this race, in his account of the dissection of the Bosjesman woman, well known under the name of the Hottentot Venus. In this individual the skull and the bones of the face presented a striking combination of the traits of the Negro with those of the Calmuck, the jaws projecting more than in the Negro, the face being wider than in the Calmuck, and the nose flatter than in either, and in this respect approximating more to the monkey." Mr. Barrow remarked long ago a resemblance between

* Lichtenstein, vol. ii. p. 16 et seq.; p. 192 et seq.

† Lichtenstein, vol. i. p. 117.

the Hottentots and the Chinese; the latter people have a conformation of the head, corresponding with that of the Calmuck. That this remark is not without foundation, may be collected from the form of the cheek-bones, and the oblique position of the orbits, observed in the preceding pages as characters of the Hottentots in general. It appears, then, that M. Cuvier's observation does not rest on the accidental peculiarity of an individual, but that the traits remarked by him were probably national characters, and not confined to the Bosjesman tribe, but common perhaps to the whole Hottentot family. It is evident, that in this people, though a native African race, and in many respects resembling the Negroes, the structure of the cranium deviates towards the platybragmate form, which chiefly prevails in Northern Asia and America.

For further anatomical details respecting the conformation of the Hottentots, I must refer to the memoir above cited.* The most remarkable trait in the organization of this race is the mass of fat on the posterior parts, which the human race, like sheep, have in Africa a tendency to assume. It must be observed that this is not confined to the Hottentots; a disposition to it appears, in a less degree, among many of the Negro and Kaffer nations.†

* Mémoires du Muséum, tom. iii. See also Mr. Lawrence's Lectures, p. 420, and Mr. Barrow's Travels in Southern Africa.

† See Quarterly Review, vol. xxxiii.

A very peculiar circumstance in the physical character of the

SECTION III.

Of the Kaffers.

To the northward of the Hottentot countries live the Kaffers; various tribes of which nation extend, as it appears, entirely across the African continent from sea to sea, cutting off the territories of the Hottentots in the southern extremity. On the western side, beyond the Orange river, and the country of the Namaqua Hottentots, are the Dammaras, of the Kaffer race,* who inhabit a mountainous country of unknown extent towards the north and the east. These tribes are very little known to Europeans. The proper Kaffers, or the people who are chiefly known to the colonists by that name, are the tribe of Koossas, in the countries near the eastern coast, who are separated from the Hottentots, on the south, by the Great Fish River. To the northward of the Koossas are the Tam-bucki, or Mathimba Kaffers: and to the northward, the Bishuanas, who inhabit an extensive country in the interior of Africa, containing several large and populous towns; among them is

Bushmen is reported by Burchell. He says, (p. 92,) "from the concurrent testimony of all the Hottentots, I learnt that the teeth of the Bushmen do not decay, but in time wear down like those of sheep. The front-teeth of old people wear down to mere stumps." This circumstance is the more remarkable, as it agrees with the observation of Professor Blumenbach respecting the ancient Egyptians.

* Travels of Mr. Barrow; also of Mr. Burchell.

Leetakoo, the capital of Bishuana. The present description of the Kaffers refers to the tribes now mentioned, and more particularly to the Koossas.

The personal characters of the Kaffers are thus described by Lichtenstein. He says that they are much taller, stronger, and their limbs better proportioned than those of any other African nation. Their colour is brown, their hair black and woolly. Their countenances have a character peculiar to themselves, and distinguish them from all other nations. They have the high forehead and prominent nose of the Europeans, the thick lips of the Negroes, and the high cheek-bones of the Hottentots. Their beards are woolly, and much fuller than those of the Hottentots.*

Mr. Barrow had given nearly the same description of the Kaffers, except in what relates to their complexion.† He says that they are tall, robust, and muscular; one of the finest races of people in the world. Their complexion, "in some tribes, varies from a deep bronze to jet black, but most generally the latter is the prevailing colour."‡ He is here speaking of the Koossas on the coast. Of the Boshuanas in the interior he remarks, that "They are not like the eastern Kaffers, invariably black; some being of a bronze colour, and others of nearly as light a brown as the Hottentots. Their hair is longer, and more inclined to be

* Lichtenstein, vol. i.

† Barrow's Travels in Africa, vol. i. p. 168—205.

‡ Barrow, vol. ii. p. 117.

straight." These people are more civilized than the eastern Kaffers.* "In respect to their colour, Lichtenstein asserts, that Mr. Barrow is certainly mistaken; and that the universal complexion of the Kaffers is rather of a clear than a dark brown. The observations of other travellers, however, agree with those of Mr. Barrow. Lieut. W. Paterson, who visited the eastern shores of Caffraria, describes the complexion of the natives as of a jet black colour; and Dampier has thus described the people of that part of the coast near Cape Natal, which is in the country of the Tambucki Kaffers:—"They are of a middle stature and well made, with oval faces, and noses neither flat nor high, but well proportioned. The colour of their skins is *black*, and their hair crisped; their teeth are white, and their aspect altogether graceful.†

On a comparison of these different accounts we can scarcely form any other conclusion, than that the complexion of the Kaffers varies in different examples, from black to a clear, and even a light brown colour. In features it seems that there are some traits common to them and the Hottentots; and some in which they approach to the Negroes of Guinea; but in figure, and in other respects, they recede from both.

We shall proceed to inquire how far the race of Kaffers extends towards the north, and to collect

* Compare Barrow's Travels in Africa, vol. i. p. 168—205; and his Journey to the Booshuanas, p. 401.

† Dampier's Voyage.

the scanty notices which we have of their tribes in this direction, but must first offer some general remarks on the population of the eastern coast of Africa.

SECTION IV.

Of the Coast of Zanguebar.

THE eastern coast of Africa was the seat of very ancient colonies. The Phœnicians traded thither in ages beyond the reach of historical accounts. It is extremely probable, that the Ophir of Hiram and Solomon was situated somewhere on this coast. In later times commercial seats on the African shores were the medium of trade between India and the west, and were occasionally frequented by Greek and Roman merchants. But these settlements were without any considerable influence on the people of Africa. The Arabs obtained a more durable footing on the Agisimbe of Ptolemy, which they termed Zanguebar, or the "Coast of the Negroes, or black people;" the original inhabitants being described as of that colour, with curled or woolly hair. By the traders from Yemen colonies were settled on the coast at Magadoxo, Melinda, Quiloa, Zanzibar, Mosambique, and Sofala. At several of these places, particularly at Quiloa, the capital, large cities were built of stone. The natives of all these places at the time of the discovery of Zanguebar by the Portuguese, were a mulatto, or mixed people, descended from the Arabian, and other foreign colonists who had intermixed with the original inhabitants. The Portuguese obtained pos-

session of nearly the whole coast, and settled there in considerable numbers; but their colonies have dwindled away, owing to the decay of their eastern commerce, and the insalubrity of the climate, which is found to be particularly destructive to Europeans.*

The degree of civilization which existed on the coast seems to have diffused its influence not far in the interior, where the natives still preserve their original manners and languages. This at least is the case in two or three instances where we have obtained incidental notices of their condition.

SECTION V.

Of the Nations in the Interior, behind the Coast of Zanguebar.

THE Portuguese writers have reported the interior countries, behind the coasts of Zanguebar, to contain two vast empires, which they term Monomotapa, or sometimes Benemotapa, and Monomugi. The emperor of Monomotapa ruled over all the countries southward of the river Zambese, or Cuama. According to some writers, the title of the sovereign is here mistaken for the name of a country. Mune-motapa is a title analogous to Manikongo, *mune* or *mani*, being the appellation by

* Mosambique, the principal settlement of the Portuguese, is so extremely unhealthy, that criminals condemned to death at Goa were, as a punishment nearly equivalent, sent to this settlement, where five or six years were accounted a long life. See Murray's Account of Discoveries in Africa, vol. ii. p. 365.

which the monarchs of the Kaffer nations are distinguished.* Monomotapa is situated behind Sofala: the country is said to be fertile, and abounding with mines of gold. The sovereign, or Mune, rules over nations of barbarous people, who are remarked to be black and woolly-haired, notwithstanding the occasional coldness of some of the countries included in this empire, and the snow which falls in vast quantities upon the mountains. The people are said to be robust and well-shaped in their persons, and to be more sprightly and docile in their disposition than the black people of Quiloa and Melinda.

To the northward of the Zambese, in the country behind the Mosambique coast, is placed by the same writers, the vast empire of Mono-emugi, which reached, as it is pretended, from Abyssinia on the north, to Monomotapa on the south; and from the confines of Kongo, on the west, to the eastern sea. In this country it is said that a lake of vast extent is situated, termed the Lake of Zambri or Marawi.

SECTION VI.

Extent of the Kaffers towards the North—Natives of Delagoa Bay—Mosambique.

It is well known that there are other numerous and extensive tribes of the Kaffer race to the northward of the Tambukhi, or Mathimba, on the coast, and beyond the Bishuanas in the interior, but how

* Sanut and Davity, in *Mod. Univ. Hist.* vol. xv. p. 459.

far to the northward these nations extend, is not ascertained.

It appears that those characters of persons which are thought strongly to distinguish the southern Kaffers, gradually disappear, or are much less conspicuous in the northern tribes of the same people.

The natives of the country, near Delagoa Bay, are undoubtedly Kaffers, but they are said to be a very degenerated race. Their affinity to the Koossas and Bishuanas is placed beyond all doubt by the vocabularies of their language collected by White.*

Farther northward, at Mosambique and Sofala, where the slave-trade has long been carried on, the native people are well known to Europeans. Slaves from these countries have been carried to the Cape of Good Hope and the East Indies. They have always been considered as Negroes. By Mr. Barrow the Negroes of Mosambique are contrasted with the Kaffers:—He says, “at Mosambique and Sofala the black people are all Negroes;† and he speaks of the stupid Negroes of Mosambique as inferior in many respects to the Hottentots.”‡ The people of the countries in the interior behind Mosambique, whence the slaves are exported, have doubtless the characters which belong to the Negroes; at least the slaves are always spoken of as Negroes by travellers in the countries where they are to be met with. Yet the natives of Mo-

* Mithridates, th. iii. p. 276.

† Barrow's Travels in South Africa, vol. ii. p. 118.

‡ Ibid. p. 49.

sambique are certainly a tribe of Kaffer origin, and this will be sufficient to prove that we must not depend on the difference of physical characters, between these nations and the Negroes, as a permanent distinction. It was long ago suspected by Lichtenstein and Vater, that the natives of Mosambique and the surrounding countries are of the Kaffer race. This opinion was founded chiefly on the information obtained from the travels of Maurice Thoman, a Jesuit missionary, who lived many years in Mosambique, and the neighbouring countries. By a variety of circumstances mentioned by this missionary, compared with notices collected from other quarters, Lichtenstein was led to form an opinion, that all the tribes of savages on this side of Africa to the southward of Quiloa, as far as the country of the Koossas, are tribes of Kaffrarian origin. Vater extends these limits as far northward as Mombase. That this opinion is correct, at least as far as the people of Mosambique are concerned, has been ascertained in consequence of a discovery of Mr. Marsden, to which we shall advert at the end of this chapter, that the language of the black natives of Mosambique is a kindred dialect with that of the Koossa Kaffers: or people which extends to the southward.

As the Kaffrarian language extends so far northward as Mosambique, it follows that the whole kingdom of Monomotapa, if such a monarchy exists, is included within the limits of the country belonging to this family of nations.

The natives of Monomotapa were said, in the accounts before cited, to be black, woolly haired savages, of robust form. The country behind Mosambique is a part of the territory assigned to the second great empire of Mono-emugi. If there be such an empire, and if it reach so far as is pretended, the Kaffer nation may extend on the eastern side of Africa to the northward of the equator.

We are informed by Mr. Salt, that to the northward of the Zambese, behind Mosambique, and as far towards the north as the latitude of Melinda, dwell the people who are termed Makooa. Tribes of the Makooa are said, by the same traveller, to be found further towards the south-west, almost as far as the country of the Kaffers bordering on the Cape. They are ferocious savages, tattoo their skins, and file their teeth to a point. As to their physical structure, they are true Negroes.* Their females have, in some degree, the protruding hinder parts of the Hottentot women, whom they rival in ugliness.

Behind the Makooa, at a distance of forty-five days' journey in the interior, are situated the Monjou, who speak a dialect allied to that of the Makooa. "They are negroes of the ugliest description, of a deep shining black, with woolly hair tied in small knots, thick lips, high cheek-bones. They used bows and arrows, and appeared to Mr. Salt to be milder than the Makooa.† It has been conjectured, that from the Monjou was

* Salt's Travels, p. 36.

† Ibid. p. 33, and appendix.

derived the notion of the empire of Mono-emugi, which in our old maps fills the interior of all this part of Africa.*

Several recent travellers in southern Africa speak of a nation of Kaffers whom they term Macquina, or Macquana, and describe as a numerous people in the interior, far to the northward of the Bishuanas. If these people are, as the name and description coincide in rendering probable, the Makooa of Mr. Salt, we shall have an instance of intercourse and national relations between the northern and southern branches of the Kaffrarian stock.

From the foregoing observations I think it appears evident that the race of Kaffers is very widely extended in the south-eastern parts of Africa, and includes some nations who have ever been regarded as Negroes; and who appear, according to the most accurate accounts, to have a fair claim to that denomination, from the evidence afforded by their personal characters. But before we take leave of this race of people we must direct our view to a more celebrated empire, though perhaps of not much more certain existence, than either the Monomotapan or the Monoemugian.

SECTION VII.

Of the Nations of the Empire of Kongo.

THE whole western coast of Africa, extending southward from the neighbourhood of the equator

* Murray's Discoveries in Africa, p. 369.

to Cape Negro, in the sixteenth degree of south latitude, with the interior country, to an unknown distance, is said to have been formerly subject to one sovereign, who was styled the Mani-kongo, and governed the provinces of his vast dominion by his sonas, or black viceroys. This prince is said to have ruled over an empire nearly 300 leagues in length and 200 from west to east. The people of his country were partially converted by the Portuguese missionaries, but a few crosses suspended on their necks, and a few prayers repeated by rote, are said to be all the remaining fruits of the labours of 300 years.

It appears that no such sovereignty as that of the mighty emperor now exists; the country is divided under different chiefs. To the northward of the Zaire several petty sovereignties are tributary to the king of Loango. Among them are Makongo and N'Goy, the latter of which reaches to the northern side of the river Zaire. To the southward of the Zaire we find the extensive regions of Kongo, Angola, N'Gola or Dongo and Benguela. Besides these countries, which are often visited by navigators, there are several other states, the existence of which we only know through the medium of missionaries; Jomba or Majomba is to the northward of Loango, N'Teka is to the eastward; the Kamba nation borders on Loango and on the northern province of Kongo. The Mandongo of Oldendorp are supposed, with good reason, by Vater, to include some of the southern people, probably the natives of Benguela.

Proyart describes the languages of the states northward of the Zaire as nearly the same; differing only in provincial variations, but he regards the idiom of Kongo as distinct. Professor Vater, however, has proved that the language of Kongo differs from those of the northern states only as a different dialect of the same language, and Mr. Marsden, after comparing the vocabularies collected by Captain Tuckey, with those of Oldendorp, Hervas, and others, has concluded that the languages of Kongo, Loango, and Angola, only differ from each other in slight modifications, and coincide less perfectly with the dialects of the Mandongo and Kamba people. This learned and judicious writer is induced by the above-mentioned comparison, to believe that all these tribes mutually understand each other in conversation.*

This numerous and widely diffused nation has always been considered as belonging to that class of men termed Negroes, though the people of Kongo have been said to differ in many particulars from the African tribes to the northward of the equator. Their persons are thus described:

“The complexion of the genuine natives of Kongo is black, though not of the same degree; some being of a deeper dye than others, some are of a *dark brown*, some of an *olive*, and others of a *blackish red*, especially the younger sort. Their hair is in general black and finely curled, but some

* General Observations appended to the narrative of Captain Tuckey's Expedition, p. 389.

have it of a *dark sandy* colour. Their eyes are mostly of a fine lively black, but some of a dark sea-green colour; they have neither flat noses nor thick lips like other negroes. Their stature is mostly of the middle size, and excepting their black-complexions, they much resemble the Portuguese, though some of them are more fat and fleshy than these.*

The appearance of a reddish complexion, and of hair of a sandy colour and of sea-green eyes, in the genuine race of Kongo, indicates a stock more disposed to variation than most other negro families. The deviation towards which there is the greatest tendency seems to be the sanguine variety of the human species. Now and then it would seem that the strongest traits of this variety display themselves, at least the following characters do not appear to belong to any other. "There is, it is said, in Congo, a sort of white children, who, though born of negro parents, appear at first sight as white as ours in Europe; they have *grey eyes, red, or yellow hair*, and a *complexion not unlike some of our northern people*." These are thought by some writers to be Albinos, but certainly the description agrees precisely with the sanguine va-

* Pigafetta: Cavazzi: Mod. Univ. Hist. vol. xvi.—Pigafetta says that the Congo negroes have black, *curly*, and frequently *red* hair. He observes that they resemble the Portuguese pretty much; except in colour; the iris was in some black, but in others of a bluish green; and they had not the thick lips of the Nubians. See also Winterbottom, p. 197. Modern History, *ubi supra*.

riety and not at all with the Albino.* It is not surprising that it is looked upon by the black people as monstrous, and that absurd ideas are entertained respecting individuals so characterised. But the appearance of the sanguine variety in a Negro race is not so solitary a phænomenon as to excite unbelief. Dr. Winterbottom and other writers have reported several instances of this fact, which have been noticed in a former place.

The foregoing statements are in general confirmed by the reports of the unfortunate and enterprising men who went on the late expedition to explore the river Zaire; though they saw but little of the Kongoese nation. In the narrative of that expedition it is observed, that the Kongoese are evidently a *mixed* nation, having no national physiognomy, and many of them in their features perfectly resembling the southern Europeans. This,

* At least if these are Albinos, they are Albinos of a singular kind, and their red hair and grey eyes would prove that the albino and sanguine varieties are more closely allied than they are supposed to be, and actually are not distinguishable. Other circumstances are added which, if not derived from the prejudiced notions of the reporters, involve the subject in doubt. It is said, "when these come to be more closely examined, their white colour proves to be no better than that of a dead corpse, whilst their eyes, instead of a vivid sparkling, seem to be fixed in their sockets, and hardly appear to have any sight except by moon, or owl-light." Modern Univ. Hist. vol. xvi. p. 293.

It is said that these persons are thought so monstrous, that all born with the peculiarity are presented to the king; that they are hardly allowed to propagate. Perhaps this prevents the origination of a race of white people in Africa.

one would naturally conjecture, arose from the Portuguese having mixed with them, and yet there are very few mulattoes among them.* And Professor Smith remarked that the Mafooh of Malambo, and many of his retinue, had interesting noble countenances, with more of the Arab than of the Negro character. The party it seems only saw one instance of the white variety, the individuals of that kind being chiefly kept by the king of Kongo about his person. That instance was a girl twelve years old, daughter of a Mafooh, whose skin was perfectly white, but of a pale, sickly colour, though the father said she was quite stout and healthy; she had curly hair and negro features. The writer has neglected to say of what colour her hair and eyes were.

SECTION VIII.

General Observations of the Extension of the Kaffer Race and Language in Africa, southward of the equator.

THE foregoing remarks on the physical characters of the nations in southern Africa—I exclude from our present consideration the Hottentots,—are chiefly interesting in consequence of the fact, that the numerous tribes subject to the Mani-kongo in the west, and the Mune-motapa in the east, if such potentates exist, or ever existed, and the various tribes of Kaffers, including

* The hypothesis that these people owe their resemblance to Europeans to a mixture of race is evidently ill-founded; but the facts are deserving of attention.

the Koossas and Bishuanas in the south, are all indicated by the affinity of their languages to be of one kindred. For the knowledge of this fact we are indebted to Mr. Marsden, who has not only compared vocabularies of the different tribes in the empire of Kongo, but has also collated them with specimens of the language of Mosambique and Delagoa Bay, and with the vocabulary collected by Sparrman in the country of the southern Kaffers. As a result of this comparison, he remarks, "that the different nations comprised, as before mentioned, under the supposed empire of Congo, probably, understood each other in conversation." He adds, "Between the Congo language, and that of the tribes on the eastern side of Africa, the affinity, though often radical, is much less striking, and the people themselves must be considered as quite distinct; but the following instances of resemblance, in words expressing the simplest ideas, may be thought sufficient to warrant the belief, that the nations by whom they are employed, must, at a remote period, have been more intimately connected."

It is needless for me to insert the proofs of this conclusion, as the work from which I cite it is accessible to every body.

To conclude this subject, we find in the South African race, a sort of intermediate link between the Negro and the other forms of men. Some tribes have very little of the negro features or form of body, but much more resemble the Euro-

pean. Some, as the Kaffers, are said to be like the Arabs in form; others, as the Kongoese, like the Portuguese. But I apprehend that it would be just as reasonable to deduce the race of Kongo from Portugal as the Kaffers from Arabia. We can only conclude these different forms of person to be instances of variation in the same original stock.

For any conclusion respecting the probable origin of the Kaffer, or South African race, we are at present unprepared; and perhaps there are not data to authorize even a conjecture on the subject.

CHAPTER VII.

General Observations on the Physical Characters of the African nations; and conjectures on the relation of these, particularly of their Complexion, to the climate of Africa.

SECTION I.

Classification of Races.

ON surveying the facts we have brought together, in the foregoing pages, the following general observations suggest themselves.

The swarthy nations of Africa do not appear to form that distinct kind of people, separated from all other races of men by a broad line, and uniform among themselves, which we ideally represent under the term *Negro*. There is perhaps not one single nation in which all the characters ascribed to the negro are found in the highest degree, and in general they are distributed to different nations in all manners of ways, and combined in each instance with more or fewer of the characters belonging to the European and the Asiatic.

The distinguishing traits of these classes may be summed up under these heads, viz. peculiarities of complexion, of hair, and of figure; the first are the most generally diffused. Now we have to remark, that those nations who are of a deep black colour. as the Yollofs, and other tribes on the Senegal,

have fine forms, regular features, are in their figure and countenance almost Europeans; and the people on the Gold Coast and Slave Coast, who have most of the Negro in their features and figure, are much lighter in their colour. Such is the way in which these peculiarities are distributed. Our idea of this circumstance will be more correct by mentioning particulars.

1. There are tribes who have few other African peculiarities than their swarthy or black complexion, and who in their form nearly resemble Europeans; their hair, though curled and somewhat frizzled, is not woolly. Such are the Barabras, or Noubas, the Bedjas, the darkest of the Abyssinians; perhaps some families of the Tuarick, at least of the Tibboo, may be referred to this class.

2. Other tribes have the complexion and hair of the Negro, with the figure and whole conformation nearly European; of this class are the Yolloffs, as before mentioned, and some tribes of the great South African race, as the darkest of the Kaffers; among the people of Kongo some are of this description, while others have the negro features.

3. Other instances have been mentioned in which the black colour is combined with negro features, while the hair is more like that of Europeans.

4. If we compare those nations whose colour deviates towards a lighter shade, we find some who have the hair peculiar to the Negro, with a figure and features resembling the European, or at least, unlike those of the ideal negro. Such are

the Bishuana Kaffers, of a light brown complexion, and the tawny Hottentots. It is by the nature of their hair chiefly that these nations are associated with the African variety. I am not certain whether there are any tribes in Africa who have a light colour, with European hair, and only Negro features; but examples of this description are found, as we shall see, in other parts of the world.

SECTION II.

Of the Relation to Climate.

IF we inquire whether the physical characters of the Africans—I allude now chiefly to their complexion, and the nature of their skins—have any relation to climate, facts decide the question in the affirmative; for we might describe the limits of Negroland to the north and south with tolerable correctness, by saying that it is bounded on both sides by the tropics; that is, that the native country of all the races of very dark colour seems to be in the intertropical region. To the northward of the tropic of Cancer, and to the southward of that of Capricorn, the native people, whether woolly-haired or otherwise, are of lighter colour. To the southward we have the Hottentots, in whom the hue of the Negro is diluted to a yellowish brown; and even the Kaffers are of lighter colour in general. Northward of the Senegal we find the Tuarick, in the oases of the Great Desert; sometimes, as it is said, black, but in the mountains of Atlas, at least where they are called Shellahs, and in the

north of Africa, where they assume the name of Berbers, almost white.

There are exceptions to this general observation, but perhaps they are hardly such as will be allowed to weaken its force. At Mourzouk, in Fezzan, which is at a considerable distance from the tropic, the people have nearly Negro characters, and are of black complexion; but it appears that the Fezzanese are almost a nation of slave-dealers, and themselves in great part the progeny of slaves. Mourzouk lies on one of the great paths of the African slave-trade, from Soudan to the Mediterranean. The population is continually renewed by the constant influx of Negroes from Soudan. On the other hand, in the south, where we find people of a jet black colour on the coast of Natal, it may be argued that this is not their native country. It has long ago been observed by Lichtenstein and Vater, that the Koossas who inhabit that part of Kaffraria, are a foreign people, who probably, at no very distant period, intruded themselves into it. The names of places are of Hottentot extraction; and there is little doubt that all that tract of country was occupied by the Hottentots, who were driven out of their possessions by Kaffer invaders from the north.

But this relation of the Negro races to the intertropical climate may admit of two different explanations.

1. Is the climate of intertropical Africa capable

of producing such a change in the physical character of the human species, as to convert those tribes who reside under its influence during a sufficient period of time, into Negroes, or to give rise to the peculiarities of the Negro in races of different character? and are these peculiarities again lost, when the same stock is removed from the region where they have been produced?

2. Or do the Negro races constitute a variety, or kind of men so adapted by constitution to a tropical climate, that they only thrive within it, and dwindle away when removed from it; whilst the lighter races, on the other hand, only exist with vigour in temperate regions, and gradually disappear in those parts which are most salubrious to the Negro, and promote the increase of a Negro population? Either of these hypotheses will serve to solve the phenomenon. It appears not very improbable that both of these suppositions are true to a certain extent, and that both principles have a share in giving rise to the observed connexion between the physical characters of the African races, and the climates to which they appear to be limited.

In support of the first hypothesis few facts that are of much weight can be collected from the history of the races we have surveyed. However, it may be observed, that the Kaffers of Bishuana are of a clear brown colour, though many tribes, of kindred origin, from Mosambique to Kongo, are quite black. To the northward, the Tuarick vary as before observed: the mountaineer tribes of Atlas

are said to be white, whereas the Tuarick of Guatala are reported to be nearly as black as Negroes; but these people are, as yet, scarcely so well known as to authorise a confident statement in these respects. Perhaps it may be proper to advert, under this head, to the fact before observed, that in various high and mountainous tracts, among the Negro nations, are interspersed tribes of a red colour, into which the black complexion of the neighbouring people seems to pass by degrees. As to the efficacy of an African climate in transmuting other races into Negroes, we can find no example of such a change. But we ought not entirely to pass by the circumstance, that the Abyssinians, though of Arabian origin, have a dark olive complexion in Africa, or those instances in which it appears that the genuine descendants of Arabs are nearly black.

As for the Gallas, we hardly know where to place them. Bruce says, that some of them are white, and that those of hot and low countries are black. It appears that they are not Negroes, though from the interior of Africa. Nobody has given us any account of their native country. Perhaps they may be found to be of the same class of people as the Foulahs, Nouba, and other copper-coloured races before described, whose complexion has considerable variety of shades.

2. A much greater number of facts may be adduced in support of the second hypothesis.

That the constitution of the Negro is, in a peculiar manner, adapted to tropical climates, ap-

pears from the history of the West Indies, and the hot parts of South America. Into these countries, foreign to both races, the Negroes and Europeans were introduced nearly at the same time, or rather the experiment was first tried with Europeans. The result is, that though Europeans can exist in the West India Islands, in the Floridas, Guyana, Demarara: they live in those places as exotics, while the Negro race flourishes there, and is capable of laborious exertion.

The same conclusion appears to arise from comparing the state of European colonies in tropical Africa, with those of the same people in temperate climates, as in America and Australia. Wherever colonies of Europeans have been formed in temperate countries, they have soon flourished, and the white population has multiplied so fast as to encroach upon the native, and in many instances entirely to supersede it. But in Africa, colonies of European and Asiatic people have generally dwindled away. The coast of Zanguebar was colonized many centuries ago, and even long before its discovery by the Portuguese, by Arabian settlers from Yemen and the Persian Gulf. Probably, at a still earlier period, Phœnician settlements had existed at Sofala, and on other parts of the same maritime tract. The Portuguese formed colonies at Quiloa, Mosambique, and in various parts of Zanguebar, as they also did at Kongo. Other European nations have made settlements in like manner on different parts of the African shore. The un-

congenial nature of the climate of Africa, with reference to the constitution of the white races, has everywhere prevented the population in these settlements from flourishing and multiplying; otherwise we should find large provinces occupied by the descendants of European colonists, as in North America. It would therefore appear, that the reason why we find no white races of men within the tropics in Africa, is not owing to the fact, that black nations had by accident previously gained possession; but because white races, when transported thither, are soon destroyed by the climate.*

On the other hand, in cold and temperate climates, the African race seems to exist with difficulty. They are much more prone to Scrofula and Phthisis than the generality of Europeans; the climate of the north is uncongenial to them. Hence, though a constant influx of Negro slaves takes place from Soudan into Turkey, it is without effect or impression. If we may believe Herodotus there was once a colony of woolly-haired Africans in Colchis; whether the story that they were left there by Sesostris were true or false, we have the evidence of a witness for the characters

* It may be worth while to remark here, that we have seen occasional instances, in which the light varieties have sprung up among the black population of Africa. I allude to white negroes, who are often of the xanthous variety. But they do not multiply. They are like seeds which perish in an uncongenial soil.

of the people; but these have dwindled away. The black race seems incapable of getting a permanent footing in any cold country. On the other hand, whenever it happens to be placed in tropical countries, this stock takes root and flourishes.

by the descendants of Europeans who have been in North America. It would not be surprising if the reason why we find no white races in Africa, within the tropics in Africa, is not owing to the fact, that black nations had by accident previously gained possession; but because white races, when transported thither, are soon destroyed by the climate.

On the other hand, in cold and temperate climates, the African race seems to exist with difficulty. They are much more prone to diseases, and I think than the majority of Europeans: the climate of the north is unfavorable to them. Hence, though a constant influx of Negro slaves takes place from Senegal into Turkey, it is without effect or impression. If we may believe Herodotus there was once a colony of woolly-haired Africans in Colchis; whether the story that they were sent there by Sesostris were true or false, we have the evidence of a witness for the character

of the race. It may be worth while to remark, that we have seen occasionally instances, in which the light varieties have spread among the black population of Africa. I shall not write of Negroes who are often of the Kanuri's variety. But they are not much. They are like some which point to the

general

BOOK IV.

**SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR
RACES, CONTINUED. PART II. HISTORY OF THE
RACES OF MEN DISPERSED THROUGH THE GREAT
SOUTHERN OCEAN.**

CHAPTER I.

*General account of the different classes of People found in
these regions.*

THERE is no part of the world which presents a greater number of facts illustrative of the physical history of mankind, than the groupes of islands which are scattered through the Great Southern Ocean. This ocean, in its widest extent, may be said to comprehend all the vast regions which reach from Madagascar, or from the eastern coast of Africa, to the shores of Chili and Peru. It is generally divided into the Indian and Pacific Oceans. The parts which are chiefly interesting to us at present, are those seas interspersed with numerous islands which extend from the Isles of Sunda, on the one side, to Easter Isle, the most remotely inhabited spot in the Great Pacific, on the other.

The first individual who surveyed these regions with the eye of a philosopher, and who gave to the world any tolerably clear and accurate account of the nations dispersed through them, was Dr. J. R. Forster, who accompanied Captain Cook in his second voyage.* Forster divides the nations, who inhabit the groupes of islands in the South Seas, into two classes of people, whom he thus describes :

“ We chiefly observed,” he says, “ two great varieties of people in the South Seas ; the one more fair, well-limbed, athletic, of a fine size, and a kind, benevolent temper ; the other blacker, with the hair just beginning to become woolly and crisp, the body more slender and low, and their temper, if possible, more brisk, though somewhat mistrustful.”

“ The first race,” says the same writer, “ inhabits Otaheite and the Society Isles, the Marquesas, the Friendly Isles, Easter Island, and New Zealand. The second race peoples New Caledonia, Tanna, and the New Hebrides, especially Malli-collo.”—“ Each of these two races of men is again divided into several varieties, which form the gradations towards the other race ; so that we find *some* of the first race almost as black and slender as some of the second, and in this second race are some strong athletic figures that might almost vie with the first : however, as we have many good

* See Observations made in a Voyage round the World, by J. R. Forster, LL.D. &c.

reasons for comprehending in one tribe all the islanders enumerated under the first race; we could not help giving to all a general character, from which, on account of the extent and compass wherein these nations are dispersed, the outskirts or extremes must deviate."

Similar varieties of people have been traced throughout the Indian Archipelago. In the mountainous and interior parts of the larger Indian islands, there are a number of black or swarthy tribes, who remain in a barbarous and unimproved state. These people are in greater number and power in the great islands of New Guinea and New Britain, of which they are almost the only inhabitants. In those countries they are termed by the other inhabitants of the Indian islands, Pua-pua, or blacks, in allusion to their complexion, and thence by Europeans they are denominated Papuas.

The fairer and less barbarous tribes in the Pacific bear, as we shall further point out, a near relation to many insular races in the Indian Archipelago, who are often found in the same islands with the Papuas.

But besides these two classes of people described by Forster, we shall find it necessary to distinguish a third, which was scarcely known in the time of that writer. It includes all those tribes found in New Holland, and in some islands of the Indian Archipelago, who in their savage character and destitute condition, as well as in the complexion most prevalent among them, re-

semble the Papuas, but differ from the latter in their hair, which instead of being crisp or woolly, is lank and straight, as well as in some other physical peculiarities.

It would be premature and hypothetical to set down all the tribes included in either of these divisions, as belonging respectively to one race. Such a position has been assumed, but it has never been proved by a comparison of languages. From this remark, indeed, the fairer tribes must be excepted; these, as we shall observe more fully hereafter, speak dialects of one language. Of this language some of the Papua tribes partake, but the savage races of this class are divided into an infinite number of petty communities, few of which can understand each other, their idioms being broken into an endless variety of dialects, or for any thing that is ascertained to the contrary, being radically different. The same remark applies to the straight-haired savages of Terra Australis, and the Philippines. We must therefore, at present, consider these three divisions as comprehending so many classes or descriptions of men, brought together on account of their mutual resemblance, for the purpose of a more easy examination of particulars, without any assumed opinion that they are severally connected in descent.

As any general descriptions would be too vague for the purpose of accurate discrimination, I shall proceed to describe these nations separately, beginning with the Papuas of New Guinea, which

may be imagined to be the mother-country, or central point of all the tribes belonging to this class. After describing the races who resemble the Papuas in their dark complexion and woolly hair, we shall give a further account of the straight-haired savages before-mentioned. We shall afterwards enumerate the fairer tribes spread through the Pacific Ocean, who have been distinguished by the term Polynesians.

The southern coast of New Guinea was discovered by the Portuguese navigator Dom Jorge Alencar, in the year 1526. It was named *Nova Guinea* by the Spanish Villalobos, who, in 1543, sailed 330 leagues along the northern shore of this country, which he supposed not to have been before discovered by Europeans. The northernmost point was afterwards termed the Cape of Good Hope; this point is within half a degree of the equator, and the land extends southward to Torres's Strait, or nearly to 10° of south latitude; its length is much greater; but in 1800 a strait was discovered by Dampier, dividing the country into two parts: the eastern part was named by that navigator *Nova Britannia*. Sixty-seven years afterwards Captain Carteret found another strait which cuts off the eastern extremity of this latter country, and the name of *New Ireland* was given to this most remote part.

The whole of this country, as well as of the islands adjacent to it, is remarkable for a great ele-

CHAPTER II.

Of the Papua Races, (Woolly Hair)

SECTION I.

Of the Nations of New Guinea and the neighbouring Islands.

THE northern coast of New Guinea was discovered by the Portuguese navigator Don Jorge de Meneses, in the year 1526. It was named Nueva Guinea by the Spaniard Villalobos, who, in 1545, sailed 230 leagues along the northern shore of this country, which he supposed not to have been before discovered by Europeans.* The northernmost extremity was afterwards termed the Cape of Good Hope; this point is within half a degree of the equator, and the land extends southward to Torres's Strait, or nearly to 10° of south latitude; its longitude is much greater; but in 1700 a strait was discovered by Dampier, separating the country before called Nova Guinea into two parts; the eastern land was named by that navigator Nova Britannia. Sixty-seven years afterwards Captain Carteret found another strait which cuts off the eastern extremity of this latter country, and the name of New Ireland was given to the most remote part.

The whole of this country, as well as of the islands nearly adjacent to it, is remarkable for a great ele-

* History of Discoveries in the Pacific Ocean, by Captain Burney, vol. i.

vation above the level of the sea, most of the other lands discovered in the same part of the world being very low and flat; but near the coast and the straits are several very high burning islands. The northern shores and their productions have been best described by Dampier and Carteret; the southern parts are little known. Dampier represents the coast of the main land as "high and mountainous, adorned with tall, flourishing trees; the sides of the hills having many large plantations with patches of cleared land. The land on the eastern part of New Britain is said by Carteret to be pleasant and level near the water side, gradually rising into very lofty hills, in general covered with vast woods, but having many clear spots like plantations intermixed. This commander describes one of the islands in the strait discovered by him, and termed St. George's Channel, "the land is level and has a delightful appearance; inland it is covered with lofty woods, and near the water side are the houses of the natives, which stand not far from each other among groves of cocoa-nut trees; so that the whole forms a prospect the most beautiful and romantic that can be imagined." "These countries, in their geographical situation, and in some of their productions, bear a resemblance to the African Guinea. It is not an uninteresting fact, that in such a country, though separated from Africa at so remote a distance, a nation should exist, who strikingly resemble the natives of Guinea. Thus they are de-

scribed by those who have visited the coast. The following is the account of one of the islands on the coast of New Guinea, and its inhabitants, by Dampier.

“Gerrit Denijs Isle is high, mountainous, and woody. The bays by the sea-side are well stored with cocoa-nut trees, and we saw small houses there. The island appeared very populous, and the sides of the hills were thick set with plantations. The natives are very black, strong, and well-limbed people, having great round heads, thin hair, naturally curled and short, which they shave into several forms and dye of divers colours, as red, white, and yellow. They have broad, round faces, with great bottle noses, yet agreeable enough, except that they disfigure themselves by painting, and wearing great rings through their noses, as big as a man's thumb, and four inches long. They have also great holes in their ears, wherein they stuff such ornaments as in their noses. They are dexterous and active in their proes, which are ingeniously built. Their weapons were lances, swords, slings, and bows and arrows. Their speech is clear and distinct.”

In Antony Kaan's island, says Dampier, the men were quite black, with frizzled hair; they were tall, lusty, and well shaped. All the people seen by Dampier in these countries and the contiguous islands are described by him as of the same sort. He says, “All the people on the north coast appear to have the same language.”

M. de Bougainville saw the eastern side of New

Guinea and the islands adjacent and to the south-east. He says, "the men of New Guinea are black, with frizzled, woolly hair."

Captain Forrest, in the account of his voyage to New Guinea, remarks, "that the Papua Coffres, for so he denominates the natives of that country, are as black as the Coffres of Africa." "They wore their frizzling hair so much bushed out round their heads that its circumference measured about *three feet*, and when least two feet and a half."

Dampier informs us, that the country of Nova Britannia is "very well inhabited with strong, well-limbed negroes."

The islands near to the coast of the more extensive land, are evidently occupied by the New Guinea people, but to the westward of New Guinea, Indians, similar to those of the Moluccas, make their appearance. At Pulo Sabuda, between Ceram and New Guinea, the people, according to Dampier, "*are very tawny* Indians, with long black hair, who differ but little from the Mindanayans and others of the Indian islands." "These," he adds, "seem to be the chief, but besides these, we also saw shock, curl-pated New Guinea negroes."

Carteret sailed toward the north-west, up through the channel which separates New Britain from New Ireland. Here he fell in with several clusters of isles, and had frequent communication with the natives.

On Sandwich island, near the north-western corner of New Ireland, he says, "The people are black

and woolly-haired like negroes, but have not the flat nose and thick lips, and we thought them much the same sort of people as the inhabitants of Egmont's island. Like them, they were all stark naked, except a few ornaments made of shells upon their arms and legs.*

At the Admiralty Islands, further to the westward, were seen, says Carteret, "the same kind of people we had found before on the coast of New Ireland and Egmont Island. They were of a very dark copper-colour, nearly black, with woolly heads. They chew betel nut and go quite naked."

Labillardière describes the same people. He says their hair is crisped and black, but they frequently render it red by a mixture of ochre and oil. Their skin is a *light black*, which they sometimes adorn with red figures in different parts of their body. Their physiognomy is agreeable, and not very different from that of Europeans.†

Another cluster further to the northward is termed the Hermit Islands, "composed," says Labillardière, "like the Admiralty Islands, of one elevated central isle and a number of islets;" the whole probably of volcanic origin. The people resembled those of the Admiralty Islands, but appeared more robust.

Steering northwards from the Pacific Ocean, Carteret came to an island 50 minutes northward of the line, which he named Free-will Island. "The

* Labillardière, Voy. p. 302—311. † Carteret's Voyage, p. 379.

people here are of the Indian copper colour, the first of that complexion we had seen in these parts, with fine long black hair."

SECTION II.

Of the Natives of the long ranges of Islands, extending from New Guinea into the southern Pacific Ocean.

THE great elevated continent of Papua, under which name New Britain, New Ireland, as well as New Guinea, are included, may be represented as extending out from its eastern extremity two vast horns into the South Pacific, one of which reaches almost to the tropic of Capricorn. From the south-eastern point of New Ireland a great semi-circular range of islands stretches out, comprising many groupes of considerable extent; first, the isle named after M. de Bougainville, with some lesser ones, to which succeeds the range of Salomon's islands; at no great distance from these is the groupe of Santa Cruz, termed by Carteret, Queen Charlotte's islands; the New Hebrides and New Caledonia continue the series. The southern coast of New Guinea has been imperfectly explored; the south-eastern extremity seems prolonged into a chain of islands, of which the numbers and situation are not ascertained; this chain was named by Bougainville, Terre de Louisiade; the eastern extremity of it is termed Cape Delivrance.

The lands comprehended in these extensive ranges are inhabited by people who resemble the

Papuas, but before we venture to set them down as branches of the Papua race, it is requisite to take a more particular survey of them.

¶ 1. *Islanders of Louisiade.*

The natives of Louisiade are said by Bougainville to be "as black as the Negroes of Africa. Their hair is curled, but long, and in some of a reddish colour."

Labillardière, in the expedition commanded by D'Entrecasteaux, sailed along the northern shore of Louisiade, and among the islands. He says, there was a great population on the southern coast, a multitude of the islanders were seen in their canoes. "These savages had all woolly hair and olive-coloured skins. He observed, however, one among them who was as black as the Negroes of Mozambique, and resembled them also in other particulars. His lower lip, as is the case with them, projected considerably beyond the upper. All these islanders used betel, and they were all stark naked."* They did not understand the Malay language.

It appears that Torres, in his return from the voyage which he made with Quiros to discover the great southern land in 1606, sailed along the whole coast of Louisiade and New Guinea from Cape Deliverance to Cape Walsche. He described the natives as a "dark people, nearly naked, armed with clubs, darts, targets, and decked with plumage."†

* Labillardière, 286, Tr.

† Burney, ii. 312, 13.

¶ 2. *Of Bougainville Isle and the adjoining groupe.*

At no great distance from the southern point of New Ireland are several groupes of small islands; among them is Bougainville Island, containing lofty mountains covered with woods; the shores abound in plantations of cocoa-nut trees; it is separated by a narrow channel from another island called Bouka Island. The people of these islands are minutely described by Labillardière. He says, "the colour of their skins is blackish; they are of middle stature, and being naked, their distinctly marked muscles indicated great strength. Their figure, though not very agreeable, is extremely expressive. Their heads are very large; their foreheads broad like the rest of their faces, which are very flat, especially under the nose; their chins large and prominent; their cheeks full; their noses flat; their mouths very large, and their lips very thin. The betel, which gives a bloody tinge to their large mouths, adds to the ugliness of their appearance. Their hair was curled, thick, and bushy, like that of many Papaws whom we afterwards met with." This is one of the most minute accounts we have of the physical traits of the Papua race, and it appears from it, that they bear a considerable resemblance, in the structure of the face and head, to the Negroes of Africa.

¶ 3. *Islanders of Salomon and of Santa Cruz.*

The islands of Salomon commence at Bougainville's Strait and terminate at Cape Oriental, the

south-eastern point of the island of San Christoval.* This chain of islands was discovered in 1567 by Alvaro de Mendana. From that time until the middle of the last century they were lost to Europeans, and their existence doubted, until the voyage of M. de Surville cleared up this doubt and ascertained their situation.

Mendana made a second voyage 28 years afterwards, with a view of forming a settlement on the island of San Christoval, but could not find his way to the Salomon's Isles.† However he reached an island, not more than 40 leagues from San Christoval, which he named Santa Cruz, and after staying there some time, abandoned the search. From the time of Mendana Santa Cruz was not visited by Europeans until Carteret arrived there. He termed the isle of Santa Cruz, Egmont's Island, and called the surrounding groupe, Queen Charlotte's Isles.‡

The people of Salomon's Isles are said to have yams, bread-fruit trees, and cocoa-nut trees in great abundance, and some hogs. Some of these islands are mountainous, others low and flat. The people of Santa Ysabel, perhaps the largest of them, are said, in the accounts of Mendana's voyage, to be of the complexion of Mulattoes, and to have curly hair.

Labillardière says, that the islanders of this

* Burney, i. 227.

† Mendana was said to have found these islands on his first voyage and to have lost them on his second.

‡ Burney.

chain, which he terms the Arsacides, bore a great resemblance to the inhabitants of Sante Croix, or Santa Cruz.

The people of Santa Cruz are minutely described by the Spanish voyagers. "They were of dark complexion, some more black than others, and all with woolly hair, which many among them had stained or dyed with white, red, and other colours, and some had half the head shorn; other distinctions were observed, and their teeth were stained red. Most of them were painted or stained black, so as to make them blacker than their natural colour."*

Carteret informs us, that the natives of Queen Charlotte's Isles, or Santa Cruz, were black, with woolly heads, and stark naked. A native of Trevanier's Isle, one of the same cluster, had "a woolly head like that of the negroes, and a small beard, but he was well featured and not so black as the natives of Guinea; was of common stature, and like all the rest of these islanders, quite naked."

We have seen already that Carteret repeatedly compares them to the Papuas.

But Labillardière gives a very different account of the island of Santa Cruz: he says, "These people are in general of a deep olive colour, and the expression of their countenances indicates an intimate connexion between them and the generality of the inhabitants of the Moluccas, though we remarked some who had a very black skin, thick lips, and large flat noses, and appeared to be of a

* Burney, ii. 150.

very different race; but all these had woolly hair, and very large foreheads."

From this account it would appear probable, that since the time of Carteret some foreign invaders have encroached upon the native race of Santa Cruz.

¶ 4. *Of Taomaco, and Australia del Espiritu Santo.*

QUIROS and Torres made a voyage in 1605 and 1606, with the design of establishing a settlement in Santa Cruz, and of discovering the great southern land. They found their way to the island of Taomaco, situated about sixty leagues, as Torres supposed, to the eastward of Santa Cruz. The natives of Taomaco gave intelligence of the island of Santa Cruz, and of what happened while Mendana was there. They also described many islands to the southward, and a large country, which they termed Manicola, evidently Mallicollo, one of the New Hebrides. It thus appears that there is an unbroken communication between these islanders from Santa Cruz, on one side, to the New Hebrides on the other.

Taomaco was inhabited by two different kinds of people, some were of a light copper-colour with long hair; some black with short frizzled hair; there were also mulattoes.

The Spaniards sailed in quest of the long-sought land, and discovered one of the New Hebrides, which, immediately presuming it to be the object of their search, they named Australia del Espiritu Santo. This country is described by them as a per-

fect paradise: "The banks of the rivers," they say, "were covered with odoriferous flowers and plants, particularly orange-flowers and sweet basil, the perfumes of which were wafted to the ships by the morning and evening breezes; and at the early dawn was heard from the neighbouring woods the mixed melody of many different kinds of birds, some in appearance like nightingales, blackbirds, larks, and goldfinches. All the parts of the country, in front of the sea, were beautifully varied with fertile valleys, plains, winding rivers, and groves which extended to the sides of green mountains."

The natives of Australia are not minutely described by the Spaniards. Torres says that "they were all black and naked." A boy, carried away by Quiros, is described as of a dark colour, and with curled, that is probably, woolly hair, with good eyes and a good shape. It hence appears that these people resembled the Papuas.

Bougainville was the next European who saw Australia del Espiritu Santo. He describes the natives of the adjacent isle of Lepers:—"they are," says he, "of two colours, blacks and mulattoes;" but he adds in general terms, "that their lips are thick, their hair woolly, and sometimes of a yellowish colour. They are short, ugly, and ill-proportioned."

Captain Cook sailed round Australia; he saw many of the natives of this isle, whom he describes as being stouter and better shaped men than the

inhabitants of Mallicollo. Some of them had black, short, frizzled hair, like the people of Mallicollo; others had it long, tied up on the crown of the head, and ornamented with feathers like the New Zealanders. The latter understood the language of the Friendly islanders, and appear evidently to be new occupants of Australia; they may have found their way thither either from the Friendly Islands, which is most probable, or from some of the other groupes in this part of the Pacific Ocean, which are well known to be inhabited by tribes akin to the Friendly islanders.

We have thus far traced an almost uninterrupted continuation between groupes of islands extending to the south-eastward, from the vicinity of New Guinea and New Ireland to the northern part of the Archipelago of the New Hebrides. The native people through the whole distance appear to have some knowledge of the islands succeeding to their own in the series. The manners and customs of these savages resemble, and there is a general resemblance in their forms and complexion. It is hence probable that the population of these chains of isles originated from the central land of New Guinea.

We may observe, that in various parts of these chains of islands, which are principally possessed by Papua tribes, strangers from the northward or eastward, from the Indian isles, or the groupes of the Pacific, have come in upon them. People, speaking the language of the Tonga isles, were found by

Cook among the natives of Australia, and in the southern isles of the same groupe we have farther proofs of this fact. The two races are however distinguishable.

¶ 5.—*Of the New Hebrides.*

The chain of the New Hebrides, which commences with the last-mentioned isle, the largest of the series, is continued towards the south-west. It may be divided into two groupes: 1, the easternmost, comprehending Mallicollo, Sandwich Isle, Apu, and several smaller ones, which form a continued cluster. These are separated by a considerable interval from the southern or western groupe, comprehending Erromanga, Tanna, Annatom, and Erromang. The people inhabiting these groupes are apparently different nations, and have no knowledge of each other; at least so it appeared to Captain Cook. They are both remarkable races.

Mallicollo appears to be a very fertile island, luxuriantly clothed with wood and other productions of nature, from the sea-shores in some parts to the very summits of the hills. It appeared to Cook well inhabited, for he saw smoke by day and fires by night in all parts of it.

The people of Mallicollo, who appear to be of the same race as the indigenous inhabitants of Australia, are termed by Cook an ape-like nation, and the most ugly, ill-proportioned people he ever saw. He says, "they are a very dark-coloured, and rather diminutive race, with long heads, flat faces, and monkey-countenances." Dr. J. R. Forster says,

“the natives of Mallicollo are a small, nimble, slender, and ill-favoured set of beings, who of all men that he ever saw, border the nearest upon the tribe of monkeys. Their skulls are of a very singular structure, being from the root of the nose more depressed backwards than in any of the other races of mankind which we had formerly seen.” “Their complexion is sooty, their features harsh, the cheek-bones and face broad, and the whole countenance highly disagreeable.” “Their hair is in the greater part woolly and frizzled.” He adds, “I observed several among these people who were very hairy all over the body, the back not excepted; and this circumstance I also observed in Tanna and New Caledonia.” Captain Cook says, “their hair, mostly black or brown, is short and curly, but not quite so soft and woolly as that of the Negro. What adds most to their deformity is a belt, or cord, which they wear round the waist, and tied so tight that the shape of their bodies is not unlike that of an over-grown pismire. The men go quite naked, except a piece of cloth or leaf, used as a wrapper.”*

Captain Cook says, “the people of Mallicollo seemed to be quite a different nation from any we had yet met with, and speak a different language;” Cook had been hitherto conversant with the Polynesian tribes. “They express their admiration by hissing like a goose.”

* Cook's Voy. in Hawksworth's Collection, p. 34. Forster's Observations, p. 242.

Such are the people of Mallicollo, and probably of the other isles in the northern groupe of this chain. The people of the southern groupe have no knowledge of the existence of Mallicollo, or of any of the northern islands.

Capt. Cook says, "At first we thought the people of Tanna and Erromanga were a race between the natives of the Friendly Isles and those of Mallicollo; but a little acquaintance with them convinced us that they had little or no affinity to either, except in their hair, which is much like what the people of the latter island have, growing to a tolerable length, and very crisp and curly. The general colours of it are black and brown. Their complexion is very dark, but not quite black." Dr. Forster says, "the natives of Tanna are almost as swarthy as the New Caledonians; only a few had a clear complexion, and in these the tips of their hair were of a yellowish brown. The hair and beards of the rest are all black and crisp, nay, in some woolly."—"They separate their hair into small cues or locks, which they wind round with the rind of a slender plant."—These look like a parcel of small strings hanging down from the crowns of their heads.* Some few men, women, and children were seen who had hair like ours, but it was obvious that they were of another nation, and I think we understood they came from Erronan, the easternmost island of this groupe. It is to this island they ascribe one of the two languages which they speak,

* Cook.

which is nearly, if not exactly, that of the Friendly Islands. It is therefore probable that Erronan was thence peopled, and that by long intercourse with Tanna, and the other neighbouring isles, each has learnt the other's language, which they use indiscriminately. The other language which the Tannese speak, and, as we understood, those of Erromanga and of Annatom, is properly their own. It bears no affinity to that of Mallicollo; so that it should seem, that the people of these islands are a distinct nation of themselves."

The same writer adds, that these people are of the middle size, rather slender than otherwise. Forster asserts that they are tall, stout, and well-made. Both say they have good features, not resembling the Negroes or Mallicollese. The women labour hard, while the men are idle. Men and women are nearly naked.

Capt. Cook has described the same race in Erromanga, where, he says, that their colour is very dark, and that they paint their faces black or red. Their hair is very curly and crisp, and somewhat woolly.

Tanna is of volcanic origin, as are probably the whole chain. It is fertile in the common productions of the South Sea Isles.

In their mode of sepulture, and in some other peculiar customs, which must have been borrowed, it seems that the Tannese resemble the people of New Zealand and the Society Isles.

¶ 6. *Of New Caledonia.*

New Caledonia is a high mountainous country, which bears a greater analogy in its natural productions to New Holland than to the isles of the South Pacific. The people of New Caledonia inter their dead, and raise mounds over them somewhat after the manner of the Australian* savages. They are evidently a race of the same class as the people of the New Hebrides, but of all nations known, they most resemble the Tannese. Their language resembles that of Tanna, with a mixture of the Tonga or New Zealand dialect, or of both, as Cook conjectured.

“The New Caledonians are nearly of the same colour as the natives of Tanna, but have better features, and more agreeable countenances, and are a stouter race, a few being seen who measured six feet four inches. I observed some who had thick lips, flat noses, and full cheeks, and in some degree the look and features of a negro.”† “Their hair and beards are in general black; the former is very much frizzled, so that at first sight it appears like a negro’s. It is nevertheless very different, being both coarser and stronger than ours.” Forster says, “Their hair is crisp, but not very woolly.” Labillardière assures us that their hair is woolly,

* Perhaps the manners of the Tannese, and other nations of the New Hebrides, may have been more akin to those of the Australians before they were modified by intercourse with the Polynesian tribes.

† Capt. Cook, in Hawkesworth’s Collection.

that their persons are of the middle size, and their complexions as black as that of the people of Van Diemen's Land, whom they much resemble in the general cast of their features.

The Papua races have extended themselves further to the northward and eastward in the great ocean. In the former direction they have occupied many of the Caroline Islands.

To the eastward they are found in the Fiji, or Feejee Isles, where they have long carried on contests with the people of the Tonga Isles. We have lately obtained some further details respecting them from the missionaries in the south-sea islands. The Feejeeans are said to be a race of men superior in stature to their neighbours of the Friendly Isles, with black skins, and hair approaching to wool. They have large canoes, and are more warlike and more dexterous in the manufacture of their clothes and utensils. Their language is said to be different.*

Here we have an instance, contrary to the general observation, of a Papua race physically superior to their neighbours of the Polynesian family.

SECTION III.

Of the Papua tribes in the Isles of the Indian Archipelago, and on the continent of Malacca.

WE have traced the Negroes of the east in their southern migrations from New Guinea, and now

* Missionary Voyage.

proceed to point out how far the branches of the same stock extend toward the north.

In most of the islands of the Indian Archipelago tribes of the same race are found; or at least, the interior and mountainous districts of those islands are inhabited by very similar races. The fertile and maritime parts are occupied by more civilized people, who are of fairer complexion, and for the most part Mahomedans. By the Moors or Malays of the islands, the tribes in the interior, who appear to be the aborigines, are known by the general term Pua-pua, whence the denomination of the Papuas among the Europeans.

The great island of Gilolo, which is under the equator, and faces the north-western extremity of New Guinea, had attracted the Malays at an early period by its produce of cloves and spices. Fifty years before the discovery of that island by the companions of Magalhaens, Malay colonies were formed there, and the Spaniards found two Moorish kings in the island; the interior still acknowledged a pagan king, who was termed *Raja-Papua*.* The same foreign people had also possession of the five islands termed Moluccas, near the west coast of Gilolo. These are small conical islands; their Papua inhabitants have been since then exterminated.

The Papuas occupy the central parts of the Philippines, where they are known to the Spaniards by

* Pigafetta: in Capt. Burney's History of Discoveries in the South Seas.

the name of *Negritos del Monte*, and by a variety of other appellations. It is said that they are also found further to the northward, in the Isle of Formosa.*

The Papuas differ, as it seems, very much in their stature. The tribes of New Britain and New Guinea, at least of the eastern parts of the latter country, are described as a tall and stout race. Dampier terms them huge black men; but in the Indian islands they are said to be a dwarfish and ill-formed people.†

The mountainous districts of the Malayan peninsula are also inhabited by tribes of black savages, who are included under the denomination of Papuas. They are said to be the same sort of people as the natives of the islands; they are termed in different districts, Samang, Bila, and Dayak. The Malays, who cannot understand them, consider their language as mere jargon, which they compare to the chattering of large birds.‡

Some of the Papua tribes have formed small barbarous states, and have made some advances towards civilization, but the generality are still destitute savages, without houses or clothing, and subsisting on the spontaneous gifts of the earth or sea. They are all divided into very small communities or societies unconnected with each other. "Hence," says Dr. Leyden, "their language is broken into a multitude of dialects, which in

* Forster.

† Ibid.

‡ Raffles, in *Hist. of Java*.

process of time, by separation, accident, and oral corruption, have nearly lost all resemblance."* This is the way in which that intelligent and acute writer accounted for the fact remarked by many travellers, that the idioms of the Papua societies, like the languages of savage hordes in general, differ extremely from each other, and seldom have much resemblance, even among tribes which are shewn, by conclusive signs, of a different description, to be of one race and lineage.

* Dr. Leyden on the Indo-Chinese Nations.

By reason the language of the Chinese is not understood by black-complexioned men and women, and therefore those tribes in many of the Indian archipelago, chiefly those in the eastern and more remote parts of the archipelago, who are as black as the Papuans, or nearly so, but have straight or fair hair, and different features from those of the Papuans. In some places their features are said to resemble those of the Chinese or Malaysians; in others they differ materially from these people. In the Philippines I have seen further have occasion to observe there are black races of the description above mentioned. They are savages of the interior, though not so civilized as the Papuans. Their features are like those of Indians. In the island of Ilior we are informed by Captain Hind that the country was inhabited by Malays and inhabited by black natives who are supposed to be the aborigines; they have been expelled from the coast by the Malays, who are

CHAPTER III.

Of the Races of black Savages with straight Hair, in the Indian Archipelago, and in the Austral countries.

SECTION I.

Races of this description in the Indian Ocean.

BESIDES the Papuas who are characterised by black complexions and woolly hair, there are tribes in many of the Indian isles, chiefly those in the eastern and more remote parts of the Archipelago, who are as black as the Papuas, or nearly so, but have straight or lank hair, and different features from those of the Papuas. In some places their features are said to resemble those of the Hindoos or Malabars; in others they differ materially from these people.

In the Philippine Isles, as we shall further have occasion to observe, there are black races of the description above mentioned. They are savages of the interior, though not so uncultivated as the Papuas; their features are like those of Indians.

In the island of Timor we are informed by Captain Flinders that the central and mountainous parts are inhabited by black races, who are supposed to be the aborigines; they have been expelled from the coasts by the Malays, who are

mostly in possession of the maritime districts. These black people have straight, not woolly hair.*

The natives of the islands in Torres's Straits, between New Guinea and New Holland, differ from the indigenous people of both those countries. According to Flinders they are a people greatly superior in intelligence, and vigour of mind and body, to the Australians. They are of a dark chocolate colour, go quite naked, but in their hair and features resemble the natives of New South Wales.†

I apprehend that the barbarous races termed Haraforas, who are found in many of the Indian islands, are a people belonging to this class. We have very imperfect accounts of them. The following are the principal notices which I can collect.

¶ 1.—*Of the Haraforas, or Alfoërs.*

Except the Papuas, the Haraforas, or Alfoërs, are said to be the most ancient race of people in all the eastern islands. The Haraforas are indigenous, or immemorial inhabitants of most of the islands in the Indian Archipelago; tribes of this class are sometimes found in the same island with the Papuas. They are every where extremely barbarous in their manners, and where they have not been reduced to slavery, the different branches into which they are divided, retain a general resemblance in their habits of life. "In their manners," as we are informed by Leyden, "the

* Flinders, ii. 254. † Flinders, ii. 114.

most singular feature is the necessity imposed on every person, of some time in his life embruing his hands in human blood; and in general among all these tribes, no person is permitted to marry till he can shew the skull of a man whom he has slaughtered. They eat the flesh of their enemies like the Battas, and drink out of their skulls; and the ornaments of their houses are said to be human skulls and teeth, which are consequently in as great request among them, as they were formerly in Sumatra, the ancient inhabitants of which are said to have had no other money than the skulls of their enemies."

We have no accurate accounts of the physical characters of the Harafora tribes. Forrest, in his voyage to New Guinea, affirms that he found Haraforas in that country. He was informed that most of them resemble the woolly-headed Papuas, but that many had straight long hair. Dr. Leyden was assured that many of the Harafora tribes are lighter in colour than the Mahomedan races, and that they generally excel the latter in strength and activity.

A great variety of languages are spoken by the Harafora tribes, and it is not improbable, that like the idioms of completely barbarous societies in general, they may be totally distinct languages, and not merely dialects: but no inquiry has been instituted into this subject.

The Haraforas are found in the Moluccas, in Celebes, the Philippines, and in Magindano, where

they are termed Subano, or Manubo. The barbarous natives of Borneo belong, in part at least, to the same race; and the savages, mentioned by Mr. Marsden, who live in the interior of Sumatra, and are accustomed to atone their faults by offering the heads of strangers to the chiefs of their villages, are probably a people of the same description.*

It seems that Terra Australis is divided between the straight and woolly-haired races of blacks. Most of New Holland contains, as we shall see, straight-haired people, who may perhaps be originally of the Harafora, or of the Timorian race; but the woolly-haired people have reached Van Diemen's Land, where they are found exclusively.

SECTION II.

Of the Natives of Terra Australis.

THE countries which are most adjacent to New Holland, and from which it may be conjectured to

* Mr. Marsden informs us, that in the course of his inquiries among the natives, concerning the aborigines of the island, he has heard of two different sorts of people dispersed in the woods, and avoiding all communication with the other inhabitants. They are called Orang Kubu, and Orang Gugu. The former are numerous, and are sometimes caught and kept as slaves: they have a peculiar language, and live on whatever they catch in the woods. The Gugu are more scarce, differing but little, *except in the use of speech*, from the Orang Utan of Borneo. Their bodies are covered with long hair. One of these had children by a woman of Labau, which were also hairy. This account of the Gugu reminds us of the inhabitants of the New Hebrides.

have derived its population, are New Caledonia, which is opposite to the eastern coast, New Guinea to the northward, separated from the shores of New Holland by Torres's Straits, and the great island of Timor to the north-west. The natives of New Guinea differ considerably in their persons and manners from the Australians;* the Papuas are woolly-haired, while the natives of the northern coasts of New Holland have lank hair. Tribes more similar to the Australians are found in the islands in Torres's Straits, and in the mountainous parts of Timor. In the islands of these straits Flinders met with savages who navigated the sea in canoes, an art of which the New Hollanders are destitute. In some respects these people resembled the natives of New South Wales, particularly in their features and hair; but they were stout men, and greatly superior in intelligence and activity to the degenerate Australians. They were quite naked, and their complexion was a dark chocolate colour. The aborigines of Timor, according to the same writer, are black, and have not woolly

* Capt. Cook, however, says, "The people of New Guinea had much the same appearance as the New Hollanders, being nearly of the same stature, and having their hair short cropped; like them they were also stark naked, but we thought the colour of their skin was not quite so dark." They shot darts made of cane at the Englishmen, which, although they were at sixty yards distance, fell with great force beyond them. Cook and his companions concluded them to have been thrown out of a hollow stick, in the manner practised by the New Hollanders.

hair: they appear therefore to be a race not very dissimilar to the New Hollanders.

The first accurate account of the New Hollanders which we have, is by Dampier, who landed on the western coast in 1686. He has thus described, in his usually quaint and forcible manner, the natives of the coast about the twenty-fifth degree to the southward of the line.

“The inhabitants of this country are the miserablest people in the world. The Hodmadods of Monomotapa, though a nasty people, yet for wealth are gentlemen to these; who have no houses and skin garments, sheep, poultry, and fruits of the earth, ostrich eggs, &c. as the Hodmadods have; and setting aside their humane shape, they differ but little from brutes. They are tall, straight-bodied, and thin, with small long limbs. They have great heads, round foreheads, and great brows. Their eyelids are always half closed, to keep the flies out of their eyes, they being so troublesome here, that no fanning will keep them from coming to one's face, and without the assistance of both hands to keep them off, they will creep into one's nostrils, and mouth too, if the lips are not shut very close. So that from their infancy, being thus annoyed with these insects, they do never open their eyes as other people, and therefore they cannot see far, unless they hold up their heads as if they were looking at something above them.

“They have great bottle noses, pretty full lips, and wide mouths. The two fore teeth of their

upper jaw are wanting in all of them, men and women, old and young; whether they draw them out I know not; neither have they any beards. They are long-visaged, and of a very displeasing aspect, having no one graceful feature in their faces. Their hair is black, short, and curled, like that of the Negroes, and not long and lank, like that of the common Indians. The colour of their skins, both of their faces and the rest of their body, is coal black, like that of the Negroes of New Guinea.

“They have no sort of clothes, but a piece of the rind of a tree tied like a girdle about their waists, and a handful of long grass, or three or four small green boughs full of leaves, thrust under their girdle to cover their nakedness.

“They have no houses, but lie in the open air without any covering, the earth being their bed, and the heavens their canopy.”*

In a subsequent voyage Dampier again visited the coast of New Holland. The place he then touched at was about forty or fifty leagues to the south-west of his former landing-place. He says the people here had the most displeasing looks and the worst features he ever saw; and adds, “These were much the same blinking creatures, (here being also abundance of the same kind of flesh-flies teasing them,) and with the same black skins, and hair frizzled, tall, and thin, &c. as those were. But we

had not the opportunity to see whether these, as the former, wanted two of their fore teeth."

The natives of all other parts of the coast of New Holland which have been visited by Europeans, agree in most particulars with this description of Dampier's, but they have nowhere frizzled or woolly hair; and this circumstance, if Dampier was not mistaken, exhibits a remarkable instance of diversity.

The following description of the persons of the Australian savages, by Mr. Collins, is the most accurate that we have received. It relates to the natives of the country near Port Jackson.

"The colour of these people is not uniform. We have seen some, who even when cleansed from the smoke and filth, which were always to be found on their persons, were nearly as black as the African Negro, while others have exhibited only a copper, or Malay colour. The natural covering of their heads is not wool, as in most other black people, but hair; this particular may be remembered in the two natives who were in this country, Ben-nil-long and Yem-mer-ree-wannie. The former on his return, by having some attention paid to his dress while in London, was found to have very long black hair. Black, indeed, was the general colour of the hair, though I have seen some of a reddish cast; but being unaccompanied by any perceptible difference of complexion, it was perhaps more the effect of some outward cause,

than its natural appearance. Their noses are flat, nostrils wide, eyes much sunk in the head, and covered with thick eyebrows; in addition to which they wear, tied round the head, a net of the breadth of the forehead, made of the fur of the opossum, which, when wishing to see very closely, I have observed them draw over the eyebrows, thereby contracting the light. Their lips are thick, and the mouth extravagantly wide, but, when opened, discovering two rows of white, even, and sound teeth. Many had very prominent jaws, and there was one man who, but for the gift of speech, might well have passed for an ourang-outang. He was remarkably hairy; his arms appeared of an uncommon length; in his gait he was not perfectly upright; and in his whole manner seemed to have more of the brute, and less of the human species about him than any of his countrymen. Those who have been in that country will, from this outline of him, recollect old We-rhang."

Mr. Collins informs us, "that few of these people could be said to be tall, and still fewer well made. The men, on extraordinary occasions, wear a reed, or bone, through the *septum nasi*, which is perforated when they are about twelve or thirteen years of age. They use for this purpose the small bone in the leg of the kangaroo. Those who live on the sea-coast generally pull out the right front tooth. The women are subjected to the amputation of the two first joints of the

little finger of the left hand. The men wear bushy beards. Both sexes are naked, except a girdle round their waists. Captain Cook has described the people of the eastern coast of New Holland within the tropics, viz. in latitude 15°, at Endeavour River. He says they were in general so covered with dirt, as to conceal their natural colour. "With the dirt they appear as black as a Negro; and according to our best discoveries, the skin itself is of the colour of wood-soot, or what is commonly called a chocolate colour. Their features are far from being disagreeable; their noses are not flat, nor are their lips thick; their teeth are white and even, and their hair is naturally long and black; it is, however, universally cropped short; in general it is straight, but sometimes it has a slight curl; we saw none that was not matted and filthy." It is possible that this circumstance may have deceived Dampier, and caused him to imagine the hair of the people on the western coast to be woolly. Captain Cook saw the natives of New Holland on other parts of the eastern coast; he says they are of the same description as at Endeavour River. Our knowledge of the natives of New Holland, as of all its other natural productions, has been greatly increased by the publication of Captain Flinders' discoveries. This excellent navigator explored the coasts of Terra Australis, on the southern, eastern, and northern sides, from King George's Sound to Arnheim's land. The follow-

ving are the most important of his observations on the natives.

"The natives of the country about King George's Sound are precisely similar to the people near Port Jackson, in colour, in the texture of their hair, and in their whole personal appearance; the cadence of their songs, their mode of dress, and their ornaments, are exactly the same; only they do not extract one tooth at the age of puberty like the latter people, or use the woomerah, or throwing-stick."

Captain Flinders compared the vocabulary of the people near King George's Sound with that of Port Jackson, and both with specimens of the language of the southern extremity of Van Diemen's Land, and of the people near Endeavour River. The result was, that the languages of all these places are entirely different, as far as the evidence obtained by vocabularies went.

"On the south coast, near Port Lincoln, about midway between King George's Sound and Port Jackson, the natives were black and naked, differing in nothing perceptible from those of the former place."

Within the tropic, and particularly on the northern coast, the people differ in one respect from the natives of the southern parts. The northern Australians are a stout and tall people, compared with the diminutive and meagre savages near Port Jackson. At Hervey's Bay, on the east coast,

"the natives go entirely naked, and otherwise resemble the people of Port Jackson, but they are more fleshy;" perhaps, as Flinders conjectures, owing to a better supply of food. "Bongaree, a native of Port Jackson, did not understand a word of their language."

At Wellesley's Islands, in the Gulf of Carpentaria, two brothers were seen some inches above six feet high, not remarkable for being slender or stout; their legs, as those of Australians in general, did not bear the European proportion to the size of their heads and bodies. In features they resembled the people of the eastern coast. Their hair was short, but not curly; each had lost two front teeth in the upper jaw, like the western Australians seen by Dampier. They were circumcised.

"The natives of Caledon Bay, on the northern coast, are the same race of men as those of Port Jackson and King George's Sound; these are the three extreme points of Terra Australis. The men had lost the upper front tooth on the left side, and were circumcised: a peculiarity general on the western side of the Gulf of Carpentaria."

It seems on the whole that the people of New Holland, though they differ totally in their language at very short distances, yet at the most remote points exhibit strong proofs of unity in race. I

allude to a general resemblance of physical characters and peculiar customs.*

¶ 2. *Natives of Van Diemen's Land compared with the foregoing.*

WHETHER Dampier was correct or not in describing the natives of New Holland on the coast which he visited to be a woolly-haired race, it is certain that the people of Van Diemen's Land are in this respect distinguished from the natives of New South Wales and the greater part of Terra Australis.

The following description of these people is from Anderson, the companion of Captain Cook in his last voyage.

"The colour of the people of Van Diemen's Land is a dull black, and not quite so deep as that of the African negroes. Their hair is perfectly woolly. Their noses, though not flat, are broad and full. The lower part of the face projects a good deal, as is the case of most Indians I have seen; so that a line let fall from the forehead would cut off a much larger portion than it would in an European. Their eyes are of a middling size, with the white less clear than in us. Their teeth are broad, but not equal nor well set. Their mouths are rather wide, but this appearance seems heightened by wearing their beards long and clotted with paint, in the same manner as the hair on

* The annexed figure of a native of New Holland, Plate 8, is taken from M. Péron's voyage.



NATIVE OF NEW HOLLAND

their heads. In other respects they are well proportioned, though the belly seems rather projecting. Their manners," he adds, "resemble those of the New Hollanders in most particulars. They make huts of a similar kind, though their chief habitation is in hollow trees. They are without clothes, and cover their skins with dirt."

"As the New Hollanders," continues Mr. Anderson, "including the people of Van Diemen's Land, seem to be all of the same extraction, so neither do I think there is any thing peculiar to them. On the contrary, they much resemble many of the inhabitants whom we saw at Tanna and Mallicollo." He conjectures that their language is not entirely different from that of the islanders of the Pacific. "For of the words which were obtained of their vocabulary, one, which expressed *cold*, differed little from that used at New Zealand and Otaheite; the first being *mallareede*, the second *makkareede*, and the third *mareede*."

The dialects of these people have never been compared in a manner sufficiently accurate to determine whether this conjecture is well founded or not; but that the people of Van Diemen's Land have not always been entirely unconnected with the New Hollanders, appears from the fact that these nations have some singular customs in common. This may be seen in the account given of the Diemenites by M. Labillardière, which I shall cite.*

* Labillardière, Voy. à la Recherche de la Pérouse.

This writer says, that on a part of the coast of Van Diemen's Land he met with people, some of whom had lost one or both of the middle incisores in the upper jaw. This is perhaps a proof of connexion with the New Hollanders. However, the vocabulary collected by him indicated no affinity with the languages as yet known in New Holland. M. Labillardière describes the people nearly as Anderson had done: he remarks that the upper jaw has in children a remarkable projection, or rather that the lower jaw recedes more than usual, but that this appearance ceases as they become adult. It is a peculiarity of structure which is also observed among the Papuas of the Indian Archipelago.

SECTION III.

General Observations on the Anatomical Structure of the Black Races, both Papuas and Australians.

NOTWITHSTANDING the proofs of some intercourse between the people of New Holland and Diemen's Land, and the general resemblance which Mr. Anderson and others have observed in the bodily structure of these races, it appears probable that the latter nation are more nearly allied to the people of New Caledonia or the New Hebrides. They are a woolly-haired nation, and probably in origin Papuas, or descended from the stock of people who occupy New Guinea. Some traits of resemblance have already been mentioned between the Diemenites and other Papua nations. These

two nations, those of Van Diemen's Land and of New Holland, may serve as examples of the woolly and straight haired races. They are strongly contrasted with each other by Mr. Péron, from whose description I translate the following accounts of both.

"All New Holland," he says, "appears to be inhabited by a race, essentially different from all those hitherto known. The stature of these men is nearly the same as that of the inhabitants of Van Diemen's Land; but besides several other characteristics which it is not my design to describe at present, they differ especially from these last in the colour of their skins, which is less deep, in the nature of their hair, which is lank and smooth, and by the remarkable configuration of their heads, which have less volume, and are in some manner flattened towards the summit, while the head of the Diemenites is, on the contrary, lengthened out in the same direction. The trunk of the body in this newly discovered race is likewise in general of less amplitude; for the rest, there is the same disproportion between the limbs and the trunk, the same weakness, the same slenderness of limbs, and often also the same tumid appearance of the belly."

"In Van Diemen's Land," says the same writer, "and in the Isle Maria, which is near to it, there exists a race of men altogether different from that which inhabits the continent of New Holland. With respect to stature the individuals of this nation differ but little from Europeans, from whom

however they are distinguished by a singular conformation of body. With a head of large size, remarkable particularly for the length of that diameter, which reaches from the chin towards the sinciput; with broad and ample shoulders, loins well-shaped, glutei generally round and full, these people have at the same time, almost universally, weak and long extremities, covered with deficient muscles, with a large projecting belly.*

Notwithstanding this attempt to contrast these nations so strongly, they have, as it appears from a comparison of several different statements, many characters in common. They have also some remarkable points of resemblance to the natives of Africa, and particularly to those of the southern and eastern parts of that continent.

The Papua tribes differ very much among themselves in stature. We have seen that the people of New Guinea are described by Dampier and others, as "*huge black men with great bottle-noses.*" On the other hand Mr. Craufurd says, that among those Papuas, brought from the eastern parts of the Indian Archipelago, whom he has seen, as slaves, few or none exceeded five feet." He adds, that, "besides their small stature, they are of spare and puny frames. Their skin, instead of being jet-black, as in the African, is of a sooty colour."

A Papua, brought to England by Sir T. S. Raffles, has been examined by Sir Everard Home, who has pointed out the following marks of distinction be-

tween this race and the Negroes of Africa, as far as the characters of the former can be judged of by one specimen.

“The skin of the Papua,” he says, “is of a light colour, the woolly hair grows in small tufts, and each hair has a spiral twist. The forehead rises higher, and the hind head is not so much cut off.” This is the character noted by Péron, in the people of Van Diemen’s Land, and which, as far as we can judge from delineations and descriptions, appears to be a common one of all the native tribes of the Pacific Islands. “The nose projects more from the face; the upper lip is longer and more prominent; the lower lip projects forward from the lower jaw, to such an extent that the chin forms no part of the face, the lower part of which is formed by the mouth. The buttocks are so much lower than in the Negro as to form a striking mark of distinction; but the calf of the leg is as high as in the Negro.

That this description of the face does not fully apply to all the Papua races may be seen from many portraits in the Voyages of Capt. Cook, and from some in those of Péron and Choris. From the latter I have borrowed an engraved drawing of a Papua female, or rather of a woolly-haired inhabitant of the Philippine Islands, to which I beg to refer my readers.

The people of Mallicollo appear to be a very remarkable race. They appeared to Dr. Forster to be more flattened in the forehead than the Ne-

groes of Africa. He says their skulls are more depressed backwards from the root of the nose than those of any other nation; the facial angle should then be smaller. Their cheek-bones and face are broad.

With respect to the general characters of person in the New Hollanders, we have enough in the descriptions above cited from Collins and others. We shall only add a few particulars, chiefly with reference to the skull.

The elevation of the sinciput, and the length of a line drawn from thence to the chin, has been remarked more than once as a character of the Papuas. The same circumstance has been observed in the heads of the straight-haired Australians. Two skulls of New Hollanders are engraved in Blumenbach's Decades, and in these, as Mr. Lawrence has pointed out, though the whole shape of the head certainly partakes somewhat of the Negro form, and the forehead is depressed above the eyes, yet the head rises to a considerable height at the coronal suture. The same writer adds, that the crania of New Hollanders, which he has seen, correspond with those of Blumenbach; the superior incisores are placed obliquely as in the Negro; but none have so low a forehead and vertex as some Africans. In the skeleton of a New Hollander, in Dr. Monro's museum, it has been remarked, that the skull viewed in profile approaches very much to the form peculiar to the Negro; the bones of the nose are very much depressed; the or-

bits large and irregular; the impressions of the temporal muscles reaching almost to the sagittal suture. In the trunk the ribs and clavicle are much incurvated; the pelvis very small; the bones of the extremities more slender and longer than in Europeans.*

* Gibson. Dissert. Inaug. de formâ gentilitiâ, *Edinb.* 1809.

CHAPTER IV.

Description of the Polynesian Tribes in the Islands of the Pacific Ocean.

SECTION I.

General Observations.

HAVING concluded the survey of the Papua and Australian races, who occupy the continents of New Guinea and New Holland, and extend northwards through the Indian Archipelago to the coasts of Asia, and southward through the isles of Salomon to the New Hebrides, we proceed to the fairer and more civilized tribes of the Polynesian race, who are dispersed through the more remote groupes of islands in the Pacific Ocean.

We shall commence a review of these nations in Easter Isle, inhabited by the most remote division of the race as yet discovered, who appear to have been settled there from a very ancient period. We shall next describe the people of Otaheite and the Society Islands, who constitute one of the most remarkable nations in the Pacific. These islands form a sort of centre, whence the most northerly groupes of the Marquesas and the Sandwich Isles, as well as the southern tract of land termed New Zealand, appear, from reasons which will be adduced, to

have received their inhabitants. We proceed then westward to the groupe of Tonga, or Friendly Isles, in the course along which this race will be proved to have migrated. These, therefore, were probably first stocked with inhabitants, and perhaps sent out colonists to the western groupes. To the northward of the Tonga Isles, we find the clusters termed Navigators' or Bauman's Isle; and the great archipelago of the Caroline Isles. With the latter we conclude the particular survey of the Polynesian tribes, and then proceed to some general observations on the state of society, religion, and manners existing among them, which may assist our further inquiries into their history and origin.

SECTION II.

Natives of Easter Island.

EASTER ISLAND is perhaps the most distantly insulated spot on the habitable globe; it is of volcanic origin; the surface of the soil is strewn with lavas, and the remains of one or more craters are visible.

This island was perhaps seen by Davis, the buccaneer, in 1686. It was visited by the Dutch admiral, Roggewein, in 1722, who supposed it to be about sixteen German leagues in circuit. In the accounts of Roggewein's voyage it is said to abound in woods and forests. Captain Cook found it destitute of wood and very ill supplied with water and the productions of nature. It contained no other quadrupeds than rats, and very few animals of

any kind. The natives, however, had a breed of domestic fowls and plantations of potatoes, sugar-canes, bananas, and eddoes. La Pérouse observed among them many of the arts practised at Otaheite, as the manufacture of cloth from the bark of the mulberry-tree.

The natives of Easter Isle are a branch of the Polynesian stock; their language was understood, though but imperfectly, by Oedidee, a native of the Society's Isles, who accompanied Captain Cook. "In colour, features, and language, they bear such affinity to the people of the more western isles, that no one will doubt that they have had the same origin. It is extraordinary that the same nation should have spread themselves over all the isles in this vast ocean, from New Zealand to this island, which is almost one-fourth part of the circumference of the globe. Many of them have now no other knowledge of each other than what is preserved by antiquated tradition; and they have by length of time become, as it were, different nations, each having adopted some peculiar custom or habit. Nevertheless a careful observer will soon see the affinity each has to the other."

The writers of Roggewein's voyage say, that the natives of this island were a lively, well-made, slender race. Their complexion is said to be brown, like that of the Spaniards; but some were darker, and some quite white. Their bodies were painted with all kinds of figures of birds and other animals.

* Captain Cook's Second Voyage, vol. i. p. 290, third edition.

The women had coverings of linen, red and white, and small hats of straw.

Forster says, they are of a tawny complexion, rather darker than the Tonga islanders. Their hair, says Cook, is generally black.

The most remarkable thing in Easter Island, and indeed the most wonderful phenomenon in the whole region of the South Sea, are those colossal statues which are scattered in great numbers over the island. These appeared very surprising to Roggewein and his companions, who supposed them to be idols, and said they were attended by men with their heads shaven, who were believed to be priests. Many of these images are erected on platforms formed or faced with hewn stones, and from three to twelve feet high. The statues themselves are gigantic. One of them which had fallen, measured twenty-seven feet in length, and this was thought to be surpassed by others. They represent the half of the human figure: the features are rudely but not badly formed, the ears are prodigious, and the head is surmounted by a cylindrical cap, not unlike the ornament of some Egyptian busts. They are formed of lavas, some of a soft and friable kind, but others so hard, that it is scarcely possible to conceive that they can have been wrought by any tools of which the present natives are in possession. Captain Cook, indeed, asserts that the present inhabitants have most certainly had no hand in them, for they do not even repair the foundations of those which

have fallen into ruin. La Perouse remarked, that they are very ancient, and many of them nearly destroyed by time. Neither he nor Cook perceived that they were objects of worship with the present inhabitants. But if these statues are relics of some former nation, what has befallen the people to whom they are to be ascribed? It seems that they are still used as morais, or burial-places. There are also cylindrical heaps of stones, as monuments of the dead, the meaning of which a native of the island explained to M. De Langle, by first laying himself down upon the ground, and afterwards lifting his hands towards heaven, with an evident reference to a future state.

Captain Cook thought the population of this island did not exceed 900 persons, but La Perouse supposed it to amount to two thousand.

SECTION III.

Natives of New Zealand.

THE people of New Zealand are of the same race as the Taheiteans; for Tupia, a native of Otaheite, who accompanied Captain Cook to New Zealand, was perfectly understood by them when speaking the language of Otaheite. Tupia, at the first interview of the English with the New Zealanders, was directed to address them in the speech of his own country, "and it was with great pleasure," says Captain Cook, "that we perceived he was perfectly understood, he and the natives speak-

ing only different dialects of the same language.* The affinity of these people with the Taheiteans is confirmed by various particulars in the manners of both nations, though they have been so long separated as to have acquired some peculiar customs.

The following description of the persons of the New Zealanders by Mr. Anderson, like other accounts by the same writer, appears to have been drawn from very accurate observation.

“The natives do not exceed the common stature of Europeans, and in general are not so well made, especially about the limbs.” “There are, however, several exceptions to this; and some are remarkable for their large bones and muscles, but few that I have seen are corpulent.”

“Their colour is of different casts, *from a pretty deep black to a yellowish or olive tinge*: and their features also are various, some resembling Europeans. But in general their faces are round, with their lips full, and also their noses towards the point; though the first are not uncommonly thick, nor the last flat. I do not, however, recollect to have seen an instance of the true aquiline nose amongst them. Their teeth are commonly broad, white, and well-set; and their eyes large, with a very free motion, which seems the effect of habit. Their hair is black, straight, and strong, commonly cut short on the hind part, with the rest tied on the crown of the head; but some have it of a curling disposition, or of a brown colour. In the young

* Cook, apud Hawkesworth, ii. p. 287.

the countenance is generally free, or open; but in many of the men it has a serious cast, and sometimes a sullenness, or reserve, especially if they are strangers. The women are in general smaller than the men; but have few peculiar graces, either in form or features, to distinguish them.”*

We may conclude, from geographical situation, that the people of New Zealand were derived either from the Tonga or Society Islands, and the close resemblance of language renders it extremely probable that they originated from the last mentioned groupe. There are many points of resemblance between the New Zealanders and the Taheiteans, but there are also very remarkable diversities, which have developed themselves among these nations since the period of their separation.

SECTION IV.

Natives of Otaheite and the Society Isles.

THE island of Taheite, or Otaheite, is supposed to have been discovered by Quiros, and to have been named by him *La Sagittaria*.† It was discovered by Captain Wallis in 1767. The six islands named Ulietea, Otahà, Bolabola, Huaheine, Tabai, and Maurua, which are near Otaheite, and inhabited by the same nation, were found by Cook in 1769, and this groupe received the name of Society Islands.

* Anderson's observations, inserted in the account of the last voyage of Captain Cook, vol. i. p. 153.

† Burney.

“The natives of the Society Isles are of the largest size of Europeans. The men are tall, strong, well-limbed, and finely shaped. The women of the superior rank are also in general above our middle stature, but those of the inferior class are below it, and some of them are very small.”*

“Their natural complexion is that kind of clear olive, or *brunette*, which many people in Europe prefer to the finest white and red.” This refers to the females of the better class, who are sheltered from the wind and sun. “They have no tint in their cheeks which we distinguish by the name of colour.”† “Their hair in general is black, but in some it is brown, in some red, in others flaxen; but in the children of both sexes it is generally flaxen.”‡

“Nothing,” says Anderson, “could make a stronger impression at first sight on our arrival here, than the remarkable contrast between the robust make and dark colour of the people of Tongataboo, and a sort of delicacy and whiteness which distinguish the inhabitants of Otaheite.” “The women struck us as superior in every respect.”§ Forster terms the complexion of the Taheiteans “*white*, tinctured with a brownish yellow.” “From this complexion,” he adds, “we find,” among the

* Cook, apud Hawkesworth, ii. 187.

† Cook, *ibid*.

‡ Wallis, apud Hawkesworth, i. 260.

§ Anderson's observations inserted in the account of Cook's last voyage, ii. 146.

people of this island, "all the intermediate hues down to a lively brown, bordering upon the swarthy complexion of the New Hebrides." He adds, that a single man in Otahà had perfectly red hair, a fairer complexion than the rest, and was sprinkled all over with freckles.*

"The shape of the face is comely, the cheek-bones are not high, neither are the eyes hollow, nor the brow prominent, but the nose is in general somewhat flat."†

SECTION V.

Natives of the Tonga or Friendly Islands.

THE natives of the Friendly Isles resemble the New Zealanders in the general outline of their character, and there is no doubt of their being another branch of the same nation, since we learn, from the observation of Mr. Anderson, that their language has "*the greatest affinity imaginable*" to that of the latter people. The Friendly Islanders are more civilized than the New Zealanders. They appear indeed to have made no small progress in the arts; of which a strong instance occurs in their having terms to express numbers as far as a hundred thousand.‡

* Forster's Observations, p. 229.

† Cook, apud Hawkesworth, *ibid.*

‡ These people have a custom of cutting off one or two joints of the little finger, and sometimes of the finger next to it, in the hope of curing diseases. See account of the New Hollanders above.

These people seldom exceed the common stature, though some are above six feet; but are strong, and have stout limbs. They are generally broad about the shoulders, and have a muscular appearance, which has rather the character of strength than of beauty. They are not subject to the corpulence and general obesity which is common in Otaheite. "Their features," says Mr. Anderson, "are very various; insomuch that it is scarcely possible to fix on any general likeness by which to characterize them, unless it be a fulness at the point of the nose, which is very common. But on the other hand we met with hundreds of truly European faces, and many genuine Roman noses amongst them."—"Few of them have any uncommon thickness about the lips."—"The women have less of the appearance of feminine delicacy than those of most other nations."

"The general colour is a cast deeper than the copper brown; but several of the men and women have a true olive complexion, and some of the last are even a great deal fairer." This, as we are told, is the case principally among the better classes, who are less exposed to the sun. Among the bulk of the people the skin is more commonly of a dull hue, with some degree of roughness. There are some albinos among them.

"Their hair is in general straight, thick, and strong; though a few have it bushy and frizzled. The natural colour, I believe almost without exception, is black: but some stain it brown, purple,

or of an orange cast." In this custom they resemble the islanders to the northward of the New Hebrides.*

SECTION VI.

Natives of the Marquesas.

THE cluster of islands termed the Marquesas are five in number, situated about the ninth degree to the southward of the line. They were discovered by Alvaro de Mendana in 1595, and by him named "Las Marquesas de Mendoza." They were visited by Captain Cook, who, however, did not land on the island of La Madalena, where Mendana's intercourse with the natives chiefly took place.

The natural productions of these islands are nearly the same as those of Otaheite and the Society Islands. The natives have hogs, fowls, bread-fruit and cocoa-nuts, yams, plantains, &c. The people are a branch of the Polynesian race, nearly allied to the Taheiteans, for Oedidee, a native of Ulietea, could converse with them.

These islanders are thus described by the companions of Mendana. They are said to be in colour *almost white*: "they had long hair, which some of them suffered to hang loose, and others gathered in a knot at the top of the head. Many among them *had red hair*." In this assertion Quiros and Figueroa, who have each written an

* This account of the natives of the Tonga, or Friendly Islands, is from Mr. Anderson's observations, confirmed by Captain Cook.

account of Mendana's voyage, coincided. " They had various figures painted or wrought into their skins, of a blue colour." " They were of good stature, and so well shaped," says Quiros, " that in person they had much the advantage of the Spaniards."*

Captain Cook says, " The inhabitants of these islands collectively are, without exception, the finest race of people in this sea. For fine shape and regular features they perhaps surpass all other nations."—" The men are tattooed from head to foot. This makes them look dark ; but the women, who are but little punctured, youths, and young children, who are not at all, are as fair as some Europeans. The men are in general tall, that is, about five feet, ten inches, or six feet."—" Their hair, like ours, is of many colours, except red, of which I saw none." The Spanish writers expressly mentioned red hair at the island of La Madalena, which Cook did not visit : perhaps they may have given that term to auburn or flaxen hair. " They observe different modes in trimming the beard, which is generally long."—" Their clothing is the same as at Otaheite, and made of the same materials, but not so plenty, nor is it so good."†

* Burney's History of Discoveries in the South Sea, vol. i.

† Cook, second voyage, i. p. 309.

SECTION VII.

Natives of the Sandwich Islands.

THE Sandwich Islands are situated a little within the northern tropic; they have a considerable elevation, and the temperature of the air is moderate.

The natives of this groupe resemble the Otaheiteans in their manners and customs. But whatever resemblance, says Captain Cook, we might discover in the general manners of the people to those of Otaheite, these were less striking than the coincidence of language. Indeed the languages of both places may be said to be, almost word for word, the same.* As the dialect of the Sandwich Islands is much more like that of Otaheite, than it is to the idiom of the Tonga Islands or New Zealand,† it must be concluded that they have a closer affinity to the former people than to the latter, though there are some particulars in which they remarkably coincide with the New Zealanders.

The general character of the Sandwich Islanders is, that they are of darker complexion than the Taheiteans, and a more slender race than the natives of the Tonga Islands. "Their colour," says Captain Cook, "is nearly of a nut-brown, and it may be difficult to make a nearer comparison if we take in all the different hues of that colour; but some individuals are darker." "Their hair is commonly straight, but in some frizzling; it is black, or of a brownish black." "Their visage, especially among

* Cook's last voyage, ii. 250.

† Ibid.

the women, is sometimes round; but others have it long: nor can we say that they are distinguished as a nation by any general cast of countenance.* They partake of that peculiarity before mentioned in the features of all this race; "which is, that even in the handsomest faces, there is always a fulness of the nostril, without any flatness or spreading of the nose, that distinguishes them from Europeans."†

A singular custom prevails among these islanders of knocking out the fore teeth, which we have observed to be also practised by the New Hollanders.

We are indebted to M. Choris, an excellent artist who accompanied M. Kotzebue in the late Russian voyage, for a very satisfactory account of the physical characters of this tribe of men, which is accompanied by drawings of the persons of several nations. The following is his description of the Sandwich Islanders.

"Les enfans, en venant au monde, sont complètement noirs; la jeune fille la plus jolie, et la plus delicate, qui s'expose le moins à l'action de l'air et du soleil, est noire; celles qui sont obligées de travailler constamment à l'ardeur du soleil, sont presque de couleur orangée."‡

The hair of these people is sometimes crisp, or frizzled, approaching to the woolly appearance;

* Cook, *ibid.* 229.

† King, *apud* Cook, *iii.* 126.

‡ Voyage Pittoresque autour du Monde, avec des Portraits des Sauvages, &c. par M. Louis Choris, Peintre. Paris, 1823.

in other instances soft and flexible. M. Choris says, "Les grands se distinguent aisément du peuple; ils sont de haute taille, et gras; leur teint est brun foncé; ils ont les cheveux moins longs que les gens du commun, souvent crépus et courts; les lèvres généralement assez grosses; tandis que le peuple est petit et maigre, à le teint plus jaune, les cheveux plus lisses."*

From this description, which is very remarkable, it appears that the Sandwich islanders, though situated in a part of the Pacific Ocean most remotely separated from the countries occupied by the Papua race, yet resemble that people more in features, colour, and the texture of their hair, than any other tribe of the Polynesian stock. It would seem as if we have here an instance of a black complexion and crisp hair making their appearance in a race of different character.

The Sandwich islanders are a very active, intelligent people. They are found by various circumstances, which will be mentioned in the sequel, to belong to the same race of men as the Society islanders and the New Zealanders.

SECTION VIII.

Natives of Bauman's Isles.

THIS cluster of isles was discovered by Rogge-
wein; they were named after the captain of the

* The annexed figure of a Sandwich Islander, in which the intermediate character of the hair is well marked, is copied from M. Choris's work; see plate 6.



MAN OF THE SANDWICH ISLANDS



Tienhoven, by whom they were first seen. Captain Burney has observed, that if the Dutch narrative is correct in its statement of longitude, these are the islands seen by M. De Bougainville in 1768, and termed by him Isles des Navigateurs. Behrens, who published a narrative of Roggewein's voyage, calls the complexion of the natives of these islands "*white*, not otherwise differing from that of Europeans than by their skins being tanned by the heat of the sun." They had not their bodies painted or marked like the people of the islands we had before discovered. They were clothed from the waist downwards with fringes, and a kind of silken stuff artificially wrought. They had large hats to protect them from the sun. Their lands were separated by inclosures; they were the most civilized and honest people we had seen in the south sea."

Bougainville says the complexion of the natives of the Isles des Navigateurs was that of bronze; but he observed one man whiter than the rest.

La Pérouse's narrative informs us that a native of the province of Tagayan, north of Manilla, who sailed in one of the ships of the French navigator, was able to understand and interpret most of the words used by these islanders. The Tagaya is probably a dialect of the Tagala, a language of the Philippine race, which is one of the branches of the great Polynesian tongue.

SECTION IX.

Natives of the Caroline Islands.

THE Caroline, or New Philippine Islands, were discovered by the Spaniards about the end of the seventeenth century. They are a very extensive range, and are described as consisting of five provinces or divisions, each of which is said to have its peculiar language or dialect. The people are said to differ from the natives of the Ladrões, and to approach more to those of the Tonga Islands. Our accounts of these islands are very imperfect, being almost wholly derived from the Jesuit missionaries, who were ignorant of the history of the Polynesian tribes.

It appears from the accounts transmitted by Cantova, and other Jesuit missionaries, that the Caroline Islands contain tribes of very various people. Some of the natives are said to be negroes, others mulattoes, others white. Some were so white in complexion that Cantova fancied they must be the descendants of Spaniards; he was probably ignorant of the existence of fair races of people in the islands of the South Sea. Some of these islanders are said to resemble natives of the Philippine Islands in complexion and features, though their language differs from that of the Maria and Philippine Islands.

The Caroline islanders are said to term their

* See Lett. Edif. et Curieuses, tom. x., and Cantova's letter in the 18th volume of the same series.

chiefs or principal men Tamoles, which word has a corresponding sense in the language of the Tonga islanders. A variety of coincidences have been pointed out in their manners, which seem to prove abundantly that the population of this groupe of islands is in general of the same stock as the Polynesian tribes who inhabit the islands further to the east.*

SECTION X.

General Remarks on the Social State, Religion, and distinguishing Characters of the Polynesian Tribes in the Pacific Ocean.

IN order to facilitate a further inquiry into the history of the Polynesian race, it is necessary to make some general observations on the state of society existing among them, and on those habits which distinguish them from other nations.

There is a general resemblance in the manners of all the branches of this nation; their habits are varied in different places by accidental circumstances, but coincide in many important particulars. The Taheiteans and Tonga islanders are the most civilized, and we are the best acquainted with their history.

The Polynesians are all barbarians in the strict sense of the word. They are naturally acute and intelligent, and possess many arts which display ingenuity; but they have made no progress in the

* See a variety of notes by the editor of Cook's last voyage, vol. i. Also Burney, vol. v.

knowledge of morality and the principles of true civilization. They have derived little or nothing from the traditional civilization and improvement of Asia; they are without laws which restrain their inclinations, and display consequently the utmost ferocity of character when occasions happen to call their passions into action, and the most unbounded licentiousness; but when the gratification of their selfish propensities does not interfere with such feelings, they are kind and benevolent.*

The Polynesian tribes in the Pacific Ocean are universally without the art of writing; and they have no regular division of labour. They have, however, a division of the people into different classes. There are three ranks in the community at Otaheite. The Erees or Arees are chiefs or nobles who possess land, which is cultivated for them by the third or working class, called Toutous, who are subjected to a sort of vassalage or feudal obedience. Besides these there is an intermediate class, called in Otaheite Manahoune, who are independent possessors of land, which they cultivate by their own hands. The origin of these ranks is unknown; it has been conjectured that they arose from conquest, and that the Arees are of a different nation, and the Toutous a conquered people; but there is no proof of this position.

* This description refers to the condition of the islanders some years ago. Many of them have lately been reclaimed, as it is well known, from their savage condition, by the efforts of Christian Missionaries.

The people of these islands have the art of making cloth from the bark of the mulberry and other trees, but they are also in the practice of tattooing their skins, or ornamenting their bodies with various figures formed by punctures of a blue colour.

In many of the islands they are still cannibals, and in others Captain Cook and his companions discovered proofs that the custom of eating human flesh had formerly existed among them. It seems that the Taheiteans still sacrifice occasionally human victims.

Their religion has several peculiar and remarkable points. They believe in the existence of invisible beings, of different orders; gods, or genii, whom they term Eatooas. The first, or principal of them, gave origin, by the way of generation, to all the rest; his wife is named Tapapa, a rock, the *materia prima*. From them were born various gods, who made and preside over the sea, moon, earth, and various departments of nature. Two of these Eatooas were the parents of mankind. The soul of man, or that which feels and thinks, is also an Eatooa, and after death issues from the lips and hovers round the corpse, or the morai where it is deposited, and after a time takes its abode in a certain wooden image, of which there are many fixed up around the places of interment.* The body is at first laid in a house constructed for

* The little wooden images are termed Tahees: they are the receptacles of the invisible Tahees or souls.

the purpose, and after the flesh has rotted away the bones are buried. After a time, not definitely fixed, the souls of persons of rank, or chiefs, ascend to heaven to the region of the superior gods. There, according to some statements, they are to be absorbed into the essence of the chief deity, or eaten by him, as the Taheiteans express it. The fate of the soul after death has no dependance on the conduct of the individual; the souls of bad and good men fare alike; yet there is a notion that the gods watch over human actions and punish the wicked, but the fears of the guilty have respect to some immediate vengeance of the offended god.

The Morais are places of worship as well as of burial; in these are raised, in Otaheite, pyramids of the Egyptian construction, formed of large blocks of hewn and polished coral stone. Sacrifices of animals, and occasionally of human victims are celebrated in them. There is in Otaheite an order of hereditary priests, who are supposed to have immediate intercourse with the gods, and to be the mediators between them and the rest of mankind.*

The religion of the Tonga islanders is a branch of the Taheitean superstition. They believe that the souls of the inferior people perish at death; those of the higher ranks go to Bolotoo, an island far to the north-west, where the gods reside in

* These remarks on the religion and customs of the South Sea Islanders are taken from Hawkesworth, vol. ii. chap. 19. Cook's last voyage, with Anderson's obs., vol. ii. chap. 9., and Dr. J. R. Forster's Obs. section 9.

perpetual felicity, and there partake of all the delights their imagination can devise. The good and wicked are equally happy in these future abodes; the gods punish the guilty in this world, and not in futurity. There are different orders of *Hotooas*, or gods; some have a celestial nature; others are the souls of dead chiefs. Tonga was first peopled by the gods of Bolotoo.*

The New Zealanders also believe in *Eatooas*, but as they are perpetually removing, and at war with each other, they carry with them their Teeghees, which are rude figures cut in green stone, and they sink their dead in the sea. In Easter Island the people bury their dead near the gigantic statues, which serve instead of the Tahitean Techees, wood being very scarce among them.

These remarks on the moral and social character of the Polynesian tribes will be found important in investigating their history, because there are nations inhabiting the islands of the Indian Archipelago, in a corresponding state of society, and allied by many other circumstances to the people of the Pacific islands: the traits we have enumerated will assist us in drawing a comparison between these remotely separated tribes.

* See Mariner's Hist. of the Tonga Islands.

CHAPTER V.

Of the Population of the Indian Archipelago.

SECTION I.

Of the Dispersion of the Polynesian Race in the Indian Ocean.

THE Polynesian race, which occupies exclusively the clusters of islands situated in the more remote parts of the Pacific, beyond the narrower circuit of the New Hebrides, and other isles of the Papuas, is not confined to those distant regions of the ocean. The islands of the Indian Archipelago, as well as the coasts of the Malay Peninsula, are well known to be in great part inhabited by tribes of people, who are proved by their languages, and, some of them, by their habits of life and personal resemblance, to have sprung from the same race with the nations of Otaheite and the Tonga Isles. These people in the Indian Archipelago are often found in the same islands with the Papuas. The latter, who are savages, occupy the woods and mountains in the interior, and the races allied to the Polynesian, the more level and maritime parts.

Among the nations allied by their language to the Polynesian tribes, none are so famous as the Malays. "The idiom of the Malays," says Mr. Marsden, "is a branch or dialect of the widely extended language prevailing throughout the islands of the

Archipelago to which it gives name, (which may be understood to comprehend the Sunda, Philippine, and Molucca islands,) and those of the South Sea; comprehending between Madagascar on the one hand, and Easter Island on the other, both inclusive, the space of two hundred degrees of longitude."—"The various dialects of this speech, though they have a wonderful accordance in many essential properties, have experienced those changes which separation, time, and accident produce, and in respect to the purposes of intercourse, may be classed into several languages, differing considerably from each other."* The same author observes in another place, "that this language comprehends a wider space than the Roman, or any other tongue, has yet boasted."—"In different places it has been more or less mixed or corrupted, but between the most dissimilar branches an evident sameness of radical words is apparent; and in some very distant from each other, in point of situation, as for instance, the Philippines and Madagascar, the deviation of words is scarcely more than is observed in the dialects of neighbouring provinces of the same kingdom."†

I shall proceed to describe the tribes which are related to the Polynesian race in the Indian Archipelago, and to point out how in each groupe of islands they are blended or connected with the Papuas; but this inquiry will become more inte-

* Asiatic Researches, vol. x. 166.

† History of Sumatra, p. 209.

resting after we have considered some points in the history of these countries and their inhabitants, and particularly some conjectures which have been thrown out respecting the original source of population.

SECTION II.

Supposed Descent of this Race from the Malays.

It has been remarked above, that the Malays are one of those nations in the Indian seas who are connected in dialect with the Polynesian races. The Malays are a commercial people, and have trading colonies on various shores of the Archipelago. It has often been supposed that the peninsula of Malacca was the centre of emigration, whence all the branches of the kindred stock were dispersed.

Some elucidations which the history of the Malays has received of late years, chiefly from the learned historian of Sumatra, have thrown a strong doubt, or, perhaps, may be said to have altogether refuted the common opinion on this subject.

From the coast of the peninsula the Malays have scattered themselves over the whole Indian Archipelago, and have formed colonies in every place conveniently situated for traffic. They have gradually occupied many parts of the sea-coast, not only of the Sunda Isles, but as far as the Moluccas and the Philippines. All these coasts are generally known by the appellation of the Malay countries, and the language of the Malays has be-

come the commercial tongue, or general medium of communication. The extensive dispersion of this people, and the fact, that their speech is certainly a dialect of the Polynesian language, seemed at first to afford ground for concluding that all those tribes of islanders, whose dialects are akin to the Malayan, whether in the Indian Archipelago, or in the more remote tracts of the Great Southern Ocean, were descended from the Malays of the Asiatic continent, or were colonies sent out at more or less remote periods from the peninsula of Malacca.

An obvious difficulty, however, attended this hypothesis. It is the great difference with respect to manners and social character, which is evident in comparing the Malays with the insular tribes of the ocean. The former are an active, intelligent, commercial people; though cruel and treacherous, they are in possession of the arts of civilized countries. How different in all these respects from the tattooed and almost naked savages of New Zealand and Otaheite, who are now, or were at no remote distance of time, cannibals and idolaters of the rudest description. All these nations appear rather to have descended from some barbarians, cast by accident upon the shores of the islands they inhabit, than to be the remains of colonies sent out by a commercial people.

These considerations are sufficient to prove, that the people of the islands in the Pacific Ocean must

have derived their origin from some other source than the trading settlements of the Malays. But this subject has been placed in a different point of view, since it has been proved by Mr. Marsden that the petty states of Malacca were themselves founded at a period not very remote, by colonies of people from the islands of Sumatra and Java, but principally the former. The natives of the kingdom of Manangkabau, in Sumatra, still bear the name of Malays: they are the ancient people, from whom the Malays on the coast of the peninsula are descended. The first settlement on the continent was made about the year of our Lord 1160, and about a century afterwards it appears that the Mahomedan religion was adopted by the Malays, since which time they have been the most zealous propagators of Islam in the East. As for the original Malays of Menangkabau, it does not appear that they ever were a people addicted to traffic, or sea-faring habits, and the coasts of the island of Sumatra have long been in the possession of other nations. There is certainly no particular reason for deriving the population of remote islands from this inland people of Sumatra.

SECTION III.

Supposed Descent of this Race from the Javanese. Probable history of the Polynesian tribes in the Indian Ocean.

It might, however, be conjectured, that Java was the original point of emigration. It appears,

that while the Malays, properly so called, were confined to Sumatra, and perhaps to the inland districts, an extensive commerce was carried on in the Indian seas, of which the island of Java was the principal centre. The Javanese are said to have been lords of the Indian ocean. It has been supposed that they traded on one side to Madagascar, and on the other as far as Amboyna. To this people we are naturally induced to direct our attention. As they bore an important part in modifying the manners and imparting a peculiar character to the nations of the Indian Archipelago, it will be worth while to take notice of the facts which have been brought to light respecting their history and former transactions.

The Javanese, during the ages alluded to, were a cultivated and refined people. It seems that the arts and social culture of continental India had taken a firm root in Java, and from that centre were spread in some degree over many neighbouring countries. Previously to the introduction of Islam, which was adopted in Java but a short time before the arrival of Europeans in the East, the religion of the Hindoos had been for many ages established there, and when it was banished from thence, took refuge in the adjacent isle of Bali, where it still subsists, together with the priesthood who preside over it. Together with the religion of India, its language and its arts had penetrated into Java: of the latter vestiges exist

in the numerous remains of splendid temples, with images and inscriptions in stone and brass.* In earlier times, before the settlement of Hindoos among the Javanese, there is no reason to believe that the latter were possessed of any superiority over the other insular nations of those re-

* How long the religion of the Brahmans was prevalent in Java cannot be determined, but the connexion of the Javanese with the Hindoos was probably very ancient. Inscriptions have been discovered in Java, in the Deva Nagari characters, which are said to exhibit that form of these characters which was used in the Deccan eight or nine centuries ago. According to Sir T. S. Raffles, it was from the sixth to the ninth century of our era, that the most intimate connexion subsisted between the Javanese and the Hindoos, and it is to that period that the erection of the ruined edifices found in Java is to be ascribed. It has been inferred, from an examination of those ruins, apparently on sufficient grounds, that the Hindoos of Java were disciples of Buddha, but of a class very different from the eastern Bauddhas of the present day. Buddha, in the mythology of Java, held the place of a saint, or a reformer: he is nowhere represented as the object of worship in the temples of that island; Siva and Durga appear in all of them as the chief divinities, and all the other mythological personages are occasionally portrayed, of which it is common to find effigies in the temples of continental India.

This seems to have been the genuine and primitive character of Buddhism, which is represented in its origin as a reformation of the religion of the Brahmans. Buddha was a Hindoo saint, and, according to the notions of the mythology, an incarnation of the divinity, who came to establish a milder system of worship.—See an account of the remains discovered in Java, in Sir T. S. Raffles's Hist. of Java, and in Mr. Crawford's Hist. of the Indian Archipelago.

gions. The negative of this supposition is strongly supported by all that is known respecting the languages of the Javanese and other neighbouring tribes. It is affirmed by those who have examined with any attention the languages of these nations, that all those dialects which are refined, and indicate civilization, partake, in a similar proportion, of the language of the Hindoos; and that when these additions are abstracted, the remainder is of such a kind as to point out extreme barbarism in the people whose vocabulary and mode of expressing ideas was so defective. Among the languages which have undergone this sort of modification, and which admit of such analysis, are not only the dialects of Java, Bali, and Madura, but the Lampong and Malay of Sumatra, and even the Bugis of Celebes, though this is the speech of a comparatively savage people.*

* "One original language," says Sir T. S. Raffles, "seems at a very remote period to have pervaded the whole Archipelago, and to have spread (perhaps with the population) towards Madagascar on the one side, and to the islands in the South Sea on the other; but in whatever degree we find any of these tribes more highly advanced in the arts of civilized life than others, in nearly the same proportion do we find the language enriched by a corresponding accession of Sanscrit terms, directing us at once to the source whence civilization flowed towards these regions." *Raffles's Hist. of Java*, p. 369.

Mr. Marsden observes, that the intercourse between the continent of India and the islands, whatever its circumstances may have been, must have taken place at an early period: an inference, not only from the deep obscurity in which it is involved, but also from the nature of the terms which have been borrowed

These considerations lead us to the conclusion that the Javanese, like the other nations of the Indian Archipelago, owe the degree of civilization they had attained at the era when Islam was introduced among them, to intercourse with the Hindoos; that previously to the existence of this intercourse they were barbarians, scarcely more advanced in culture than the Polynesian tribes. At this remote period they were nearly on a level in most particulars with those insular nations, with whom they are proved, by affinity of language to be the insular language from the Sanscrit. These, he says, are such as the progress of civilization must soon have rendered necessary, expressing the feelings of the mind, the most obvious moral ideas, and the most simple objects of the understanding.

That the several languages of the insular nations are properly to be considered as dialects of one primitive tongue, according to the conclusion of Mr. Marsden, which tongue may be termed the Polynesian, may be safely inferred from the nature of the coincidences existing between these dialects. The terms they have in common are, according to Mr. Crawford, (vol. ii. p. 45,) such primitive words as must have existed in the language of the rudest savage, such, for example, as the words for *sky, moon, mountain, white, black, hand, eye, &c.* To this must be added a fundamental resemblance in the grammatical structure of all these idioms, for which we have the testimony of the same intelligent author. Such phenomena are generally allowed to evince an original affinity, and a merely dialectic difference in languages, and are not to be satisfactorily explained upon the hypothesis assumed by Mr. Crawford, that all these languages were originally distinct, but have been modified and brought to resemble each other, through the foreign influence of a lost language, which this author supposes to have been mixed with the primitive tongue of each island.—See Crawford, vol. ii. lib. citat.

be of kindred origin. It is to an early diffusion of this race, prior to the era of Javanese commerce, and while the insular people were as yet unlettered barbarians, tattooed and naked men-eaters, that we are to refer the population of the Pacific Islands. However uncivilized these nations were, it is not difficult to account for their dispersion over the Pacific Ocean. What was their first common point it would be difficult to discover, and at present I shall not attempt to conjecture, but from the Philippine Islands they probably made their way, or were perhaps driven accidentally to the Ladrões. At the Ladrões indeed we find them, already in the South Sea, and beyond the limits of the Indian Archipelago. Thence the widely extended groupe of the Caroline Islands afforded them an easy transit to the Tonga Islands. From the Tonga, or from the Caroline Islands, they passed eastward to Otaheite, and from thence found their way to the more distant clusters.

It was subsequently to the dispersion of the Polynesian tribes over the Pacific Ocean, that their brethren in the Indian Archipelago began to improve by the importation of foreign arts. Perhaps the first shade of civilization was derived from China, or the Indo-Chinese nations. Some of the islanders nearest to this quarter possess arts of which the Polynesians are destitute. Even the natives of the Philippines and Ladrões are superior in many respects to the Otaheiteans. But the great step in this progress was made through

the medium of the Javanese, who first became proselytes to the religion of the Brahmans, and received from India the arts and social culture of the continent. The commerce and settlement of the Javanese extended these advantages, more or less, to the neighbouring nations; the limits and degree of its diffusion may be estimated, as we have seen, by the correlative admixture of the Indian language with the native dialects. Lastly, the adoption of Islam, and of a more modern style of manners by the Malays settled on the peninsula, and the subsequent extension of the power of this people, and of their colonies in the Archipelago, changed the face of things, and gave origin to a third class of societies. Of all these three classes of nations or tribes, numerous examples are found in different parts of the Archipelago. The Polynesian tribes in the Pacific belong to the first.

Such are the conclusions respecting the original state and wanderings of these nations, which the most accurate researches into their history hitherto made conduct us. We shall now examine the natives of particular islands and groupes in the Indian Ocean. Afterwards some additional conjectures may suggest themselves as to the probable points of emigration.

CHAPTER VI.

Subject of the last Chapter continued. Account of particular Nations.

SECTION. I.

Of the Natives of Sumatra and the adjacent Islands.

THE Island of Sumatra has long been the seat of arts and civilization. The character of the native people has undergone great changes; they are, with the exception of the Javanese, the most cultivated people in the eastern Archipelago. We therefore cannot find here the rude manners of the unmixed Polynesians; nevertheless, in the interior of the country some remarkable vestiges may still be traced; and yet more in the range of small islands on the south-western side of Sumatra, which appear from the facts mentioned by Mr. Marsden, to have formed at no very remote period a part of the main land.*

Sumatra contains, besides those savages who have been already mentioned, as probably belonging to the Papua stock, several tribes of people who are distinguished from each other by manners and language, and in some measure by physical characters. The principal of these are the Orang Malayo, or people of the ancient kingdom of Menangkabau, who speak the Malay language;

* Hist. of Sumatra, p. 33.

the Achinese, who, through intermixture with the darker natives of western India, differ considerably from the rest of the Sumatrans, the Battas, the Rejangs, and the people of Lampong.* The languages of these tribes are, however, cognate dialects, and differ not essentially; many of their varieties depend on the different modes of expressing them in writing, for each nation has a peculiar alphabet. All of these alphabets are manifestly allied to the Sanscrit,† and probably derived from the Hindoos.‡

Mr. Marsden has given us a general description of the physical characters of the Sumatrans, which applies to all the tribes except the Achinese, who are of darker hue than the rest. “They are rather below the middle stature; their bulk is in proportion; their limbs are for the most part slight, but well-shaped, and particularly small at the ankles. Upon the whole they are gracefully formed.” The women flatten the noses and compress the heads of children newly born, a custom which increases their tendency to that shape. Captain Cook observed the same practice in the isle of Ulitea. They likewise pull out the ears of infants to make them stand at an angle from the head. Their eyes are uniformly dark and clear, and among some, especially the southern women, bear a strong resemblance to those of the Chinese, in the peculiarity of formation so generally observ-

* Marsden, p. 41.

† Ibid. p. 200.

‡ In all the alphabets of Sumatra, as well as of Celebes; the order is that of the Deva Nagari. (Raffles, i. p. 369.)

ed of that people. Their hair is strong, and of a shining black; it is constantly moistened with cocoa-nut oil. The women wear their hair long, sometimes reaching to the ground. The men destroy their beards with chunam, or quick lime, and their chins are so smooth, that an uninformed person would imagine them naturally destitute of hair. "Their complexion is properly yellow, wanting the red tinge that constitutes a tawny or copper colour. They are generally lighter than the Mestees, or half-breed of the rest of India; those of the superior class, who are not exposed to the rays of the sun, and particularly the women of rank, approaching to a degree of fairness." In this respect some of them surpass the brunettes of Europe: the major part of the females are ugly.

The Battas, or Batak tribes, who inhabit the central parts of the island, are believed, on good grounds, to be the most ancient people, or to be the least altered from the character of the aborigines.*

"The Battas are in their persons rather below the stature of the Malays, and their complexions are fairer; which may, says Mr. Marsden, be perhaps owing to their distance, for the most part, from the sea, an element they do not at all frequent."

The religious notions of the Battas are, in part, derived from the Hindoos, and they have priests whom they term Gurus; they seem to have blended a number of fictions, evidently derived from the mythology of the Brahmans, with vague superstitions of a ruder origin. They are cannibals, eat

* Leyden, *Asiat. Res.* x. 202. Marsden, p. 365, *et seqq.*

the flesh of their prisoners in war, and of persons convicted of crimes, and, like the New Zealanders, they connect these practices with certain ideas of a religious nature, and regard them as ceremonies. They have their limbs, on particular occasions, tattooed in the shape of birds and beasts, and painted of divers colours. Hence probably their national appellation; for Batuk, in the Bisayan language of the Philippines, is the term by which the tattooed people, named by the Spaniards Pintados, are distinguished.*

The chain of islands on the south-western side of Sumatra contains several scattered tribes, which are considered by the natives of those parts as distinct and peculiar, because they cannot mutually understand each other. These dialects have, however, according to Marsden, a radical affinity to the older idioms of Sumatra; "they all belong to the same class, and may be regarded as dialects of a general language, prevailing amongst the original inhabitants of this eastern Archipelago, as far, at least, as the Moluccas and Philippines." For a description of these nations I have to refer the reader to Mr. Marsden; and can only notice some particulars relative to the people of the Pagi, or Nassau Islands, of whom an account has been given by Mr. Crisp in the sixth volume of the Asiatic Researches.†

The Poggi islanders are a finely formed people;

* Marsden, p. 388.

† Account of the inhabitants of the Poggi Islands, lying off the coast of Sumatra, by John Crisp, Esq. *Asiat. Res.* vol. vi.

their stature seldom exceeds five feet and a half; their complexion is, like that of the Malays, a light brown or copper colour. The numerals in their language most resemble those of the Battas and Lampongs. They are at present quite a distinct people from the Sumatrans, and much more resemble the Polynesian tribes in the Pacific. They make cloth of the bark of a tree, which they weave in the same manner as those islanders, and the practice of tattooing the skin is general among them, as among the New Zealanders. They believe in certain unknown invisible beings, to whom they sometimes sacrifice a hog or a fowl, to arrest sickness, or prevent other calamities, and they dispose of their dead nearly in the same way as the Otaheiteans. These people may be considered as representing the original inhabitants of Sumatra, before the introduction of arts and refinement by the Hindoos. The people of the Neas Islands differ in some respects from those of Pagi. According to Dr. Leyden the dialects of both these tribes are allied to that of the Battas in Sumatra.*

SECTION II.

Of the Javanese.

WE have already said enough in the foregoing chapter on the history of the Javanese, and have now little to add, except a description of their persons. Java may be considered as containing two nations. * Leyden, *ubi supra*.

tions, the proper Javanese and the Sunda people. The latter are the rudest, and the nearest to the original character of these islanders. Both have undergone modification through the medium of Hindoo colonists, previously to which they were similar in manners to the Battas, or perhaps to the natives of the Pagi Islands, to whom the basis of their language indicates them to be connected in descent.

The persons of the Javanese are thus described by Sir T. S. Raffles. "The inhabitants of Java and Madura are in stature rather below the middle size, though not so short as the Bugis and many other islanders. They are upon the whole well-shaped, though less remarkably so than the Malays, and erect in their figures. Their limbs are slender, and the wrists and ankles particularly small." "Deformity is very rare among them. The forehead is high, the eyebrows well marked, and distant from the eyes, which are somewhat Chinese, or rather Tartar, in the formation of the inner angle. The colour of the eye is dark; the nose small and somewhat flat, but less so than that of the islanders. The mouth is well formed, but the lips are large, and their beauty generally injured by the practice of filing and dying the teeth black, and by the use of tobacco, sivi, &c. The cheek-bones are usually prominent; the beards very scanty, the hair of the head generally lank and black, but sometimes waving in curls, and partially tinged with a deep reddish brown

colour. The countenance is mild, placid, and thoughtful, and easily expresses respect, gaiety, earnestness, indifference, bashfulness, or anxiety.

"In complexion the Javans, as well as the other eastern islanders, may be considered rather as a yellow, than a copper-coloured or black race."

"They are generally darker, however, than the tribes of the neighbouring islands, especially the inhabitants of the eastern districts, who may indeed be considered as having more delicate features, and bearing a more distinct impression of Indian colonization, than those of the western or Sunda districts. The Sundas exhibit many features of a mountainous race. They are shorter, stouter, harder, and more active men, than the inhabitants of the coast and eastern districts. In some respects they resemble the Madurese, who display a more martial air than the natives of Java." It is added, that a considerable difference exists in complexion and features between the higher and lower classes, and in different districts.*

In Bali the religion and government are still Hindoo; the people are divided into the four great Hindoo castes, and there are Brahmans of two orders, termed *Brahmane Sewa* and *Brahmane Buda*. The natives of Bali, though of the same stock, differ considerably from the Javans: "They are above the middle size of Asiatics, and exceed, both in stature and muscular power, either the Javan or Malayan."†

* Vol. i. p. 59, &c. Raffles's Hist. of Java.

† Raffles, ii. Appendix K.

SECTION III.

Of the People of Celebes.

THE northern and central parts of the island of Celebes are inhabited by barbarous tribes of Haraforas, or Turajas, as they are here termed; these people are supposed to be the aboriginal inhabitants.

The Turajas resemble in their manners the Dayaks of Borneo, and the Harafora tribes of the eastern Archipelago in general. They are said to deposit their dead in caves on the sides of hills.* We have no satisfactory account of these tribes and their languages or physical characters.

The southern parts of Celebes are inhabited by the Bugis and Macassar nations, who partake of that species of improvement to which the native races of the more western islands have attained: at the same time they preserve some ferocious habits. The Bugis and the Macassars speak different idioms, which are, however, merely dialects of one language.† The Bugis language, according to Dr. Leyden, is essentially allied to the Batta, as also to the Tagala, which is the primitive tongue whence the various dialects of the Philippine islanders are derived.‡ These three lan-

* Raffles, *ibid.*

† Raffles, *ibid.*

‡ M. Le Gentil says, "Les Bisayas et les Pintados, que l'on a trouvé à Camarines, à Leyte, Panay et Zebu, ont la même origine que les peuples de Macassar, qui se peignent le visage et le corps à la façon des Bisayas des Philippines." Voy. tom. ii. p. 58.

guages are cognate, and have a radical affinity, not only in their vocabulary, but also in their grammatical structure.* The races of people, therefore, who use them, are probably of kindred origin.

The Bugis, before their conversion to Islam, had adopted the Hindoo religion, but the civilization of the Hindoos had made but little progress among them. In the interior parts of their country the custom of eating prisoners of war is said to prevail still among them as among the Battas in Sumatra. The Bugis are acquainted with the use of letters; their alphabet is of cognate structure with those of the Tagala and Batta races, and has some affinity to the letters of the Javanese. The aboriginal Bugis appear indeed to have had the most intimate connexion with the ancient Battas.

The natives of Celebes were said to be short, of yellowish complexion, and to have features somewhat resembling those of the Tartars or Chinese. Their colour, though more yellow than that of European women labouring under chlorosis, yet procures for them, from the nations of the Moluccas, the appellation of whites.†

* Crawford, *ibid.*

† Labillardiere, *Voy. à la Recherche de la Pérouse.*

SECTION IV.

Of the Natives of Borneo.

THE whole inland countries of Borneo are inhabited by barbarous tribes, who are supposed to be of the Harafora race; they are termed in different districts Idaan or Marut, and Dayaks. They resemble the Haraforas in stature, colour, and manners; in particular those savage customs which are characteristic of the Haraforas, are common to the Idaan and Dayaks.* On the north-eastern coast of Borneo are tribes of cannibals termed Tiran or Tedong, who live by piracy. On other parts of the coast are the Biajus, who subsist by fishing; these call themselves the aborigines of the island; they are all supposed to be originally Idaan.†

SECTION V.

Of the Philippine Islanders.

THE Archipelago of the Philippine Islands is about three hundred leagues from north to south, and a hundred and ninety from east to west; it comprehends a great number of islands, estimated by some at one thousand, by others at fifteen hundred. Of these Luzon, in which Manilla is situated, is the largest, and it is the most northerly of the whole groupe: Mindanao is next to it in

* Raffles's Java. Appendix on Celebes,

† Leyden, *ubi supra*.

extent, and is at the southern extremity. These islands abound with all the productions of a fertile, and even exuberant soil, under a tropical climate, and are very populous; they are little known to Europeans in general, but a great store of information respecting them exists in the works of the Spanish missionaries.

In consequence of a bull of the Holy See, which obliged the kings of Spain to establish and maintain the Christian religion in their foreign possessions, a great number of missionaries have been sent to the Philippine Islands. The first attempt was made by the Augustines in 1565, and an emigration of ecclesiastics of various orders continued during the succeeding years. The several orders divided their spiritual provinces among them, and exerted themselves with the greatest assiduity in spreading among the pagans and savages of these islands, the population of which has been estimated at three millions of persons, the blessings of the catholic faith. They soon rendered themselves familiar with the numerous languages of the people among whom they were to labour, and their endeavours appear to have been crowned with ample success. If we are to believe the narratives of these zealous and honest missionaries, miracles have been wrought by heaven in their favour.

Each religious order has compiled a history of its particular province, in three or four folio volumes, containing narratives of its proceedings in

the conversion of the natives, together with historical notices of the countries and their inhabitants. Of these the work of the Franciscans, published in Manilla in 1738, is considered the best. Some parts of it have been translated by M. le Gentil, who has made it the basis of his history of the Philippine Islands, a work which contains more information respecting these countries than can be met with in any other. But the most correct accounts of the native races of people, and their languages, are to be found in the original letters and oral communications of several missionaries, which were published by Hervas, in his *Catalogo delle Lingue*. As their contents are extremely interesting, and in the hands of but few persons in this country, I shall make no apology for setting before my readers the most important particulars contained in them.

It appears that the extensive countries included in this archipelago contained at the time of their discovery, a variety of nations in different states of society, and differing very much in physical character. They are all to be reduced to two principal classes. First: the Bisayos, Tagalos, and other tribes allied to them, inhabited most of the level and maritime parts, and the best portions of all the islands. These people bore a near resemblance to the Battas, Bugis, and some of the people of Borneo. Some of them were very barbarous, and painted or tattoed their skins, whence they were called by the Spaniards, *Pintados*,

Other tribes belonging to the same race were somewhat more advanced in social culture, and had imbibed that sort of barbaric refinement which existed in these seas before the introduction of Islam: some had even adopted the religion and manners of the modern Malays, whom they strongly resembled, as particularly the Mindanayans. All these tribes speak languages nearly allied to the dialects of the Sunda Isles and of the Pacific Ocean, and therefore to the old, or insular Malayan. Secondly: there were, and are still, in the interior of the islands, races of more savage character, who are supposed to be the original inhabitants. These people are termed *Negritos del Monte*, or *Mountain Negroes*: they have also other appellations, which will be mentioned. The latter class contains two different kinds of people: woolly-haired races, who resemble the Negroes of Guinea in their features; and tribes of straight, lank hair. A fact which we should not have expected to discover is, that these black races speak cognate dialects with the tribes of lighter, or fair complexion: that is, their languages are dialects of the Bisaya and Tagala. Such, at least, is the testimony of the missionaries. The following are some extracts from the writings of these priests, who certainly were not deficient either in the opportunity or desire of acquiring information.

Some general observations on the dialects of the Philippine islanders are contained in a letter of Don Francisco Garcia de Torres, who resided as

a missionary in the island of Capul or Abac, which lies in the way from the Marian Island to Luzon; this missionary had composed a dictionary, catechism, and other works, in the language of Capul, and was acquainted also with the Bisaya, Tagala, and Pampanga languages, and others which were spoken in the Philippine Islands. He says, "I agree with you in believing almost all the idioms of the Philippine, and of the other islands in their vicinity, to be dialects of, that is, nearly allied to the Malayan language, which is spoken on the continent of Malacca: this can be perceived clearly in the more cultivated idioms, such as the Tagala, Bisaya, Pampanga, &c. I understood perfectly the language of Capul, and in conversing with one of the Borneans, I discovered the dialects of Capul and Borneo to be the same, with some minute variations. In the island of Capul, or Abac, as the natives call it, there are three languages, or rather three dialects. One of these is spoken in that part of the island which looks southward. It is called Inagta, which means Negro, because the Negroes inhabit that quarter. In the northern part another dialect is spoken, termed Inabacnum. There is another general language, in which we preached and administered the holy sacraments. The *Inagta*, the *Inabacnum*, and all the other islanders, mutually understand each other, though each speaks in his own proper language. I learned all the three, and composed catechisms, a dictionary, &c. in the Inabacnum."

It seems from this account that the Negro, or woolly-haired tribes, speak, at least in some of the Philippine Islands, dialects cognate to those of the Malayan, or rather the Polynesian race. It appears that the principal languages of this archipelago are the Tagala and the Bisayan, which themselves differ but slightly from each other, as any one may perceive by comparing the *Oratio Dominica* in any of the polyglott collections. The Tagala is the language of the great isle of Luzon, and of the small neighbouring one of Marinduque; The following account of the dialects of the Tagala was obtained by Hervas from the Abbate Don Bernardo de la Fuente, a missionary, who was familiarly and critically versed both in the Tagala and Bisaya. He says, "In the Isle of Luzon the following dialects are spoken: 1. In Manilla, the capital and its environs, the pure Tagala. 2. In Camarines, the Camarino, which is a mixture of the Tagala and the Bisaya of the Isle of Samar. 3. The Pampango. 4. The Pangasinan. 5. The Ilocos. 6. The Zambale, which is proper to the mountaineers. 7. The Cagayan. 8. The Maitim, that is, Negro, which is spoken by the Negroes who inhabit the mountains in the interior. All these languages are dialects of the Tagala, and some of them differ considerably from others." Of the dialects of the other Philippine Islands we have in the same work an account written by the Abbate Don Antonio Tornos, who travelled

through all the islands, and understood all the languages spoken in them. He says, "I have seen the account of the Tagala dialects, which Signor Abbate de la Fuente places in Luzon, and I have nothing to add to his enumeration. Of the Bisayan language, spoken in the other Philippine Islands, which are often termed Bisayan Isles, there are the following dialects: 1. The Mindanao. 2. The Samar. 3. The dialect of Iolo. 4. That of Bohol. The Mindanao comprises some difficult dialects: for being detained there a year and a half in slavery, I continually endeavoured to understand some of them, and found very many words quite unintelligible to me. I made similar attempts to comprehend the dialect of Iolo, where I also was a slave about half a year. In Mindanao, which is the second of the Philippine Islands, there are the following dialects: 1. The pure Bisaya is spoken in some districts." The author then mentions several others. Among these, the fourth is the Lutao, so named from *lutao*, which signifies to swim: it is spoken by the Lutai, who live by fishing, and dwell almost continually in their barks, which are in fact their houses. 5. The dialect of the Negroes who inhabit the interior of the island, and there support themselves on the fruits of trees, and on the honey made by the bees of the woods." "In all the other Philippine Islands is spoken that language which is termed Bisayan. In Iolo, which is one of them, is to be found a resort of people, who came on

account of traffic from Malacca, Sumatra, Java, Borneo, and Celebes, or Macassar, and all their languages are intelligible to the Ioloans."

It may be observed that these missionaries regard the idioms of the Negroes as cognate dialects with the Tagala and Bisaya. This is explicitly affirmed by the Abbate Torres, in the following terms: "La lingua dell' Isola, detta de' Negri è la Bisaya stessa, col misuglio di moltissime parole forestiere;" and by De la Fuente, who says, "La loro lingua è Boholana, poiche in essa mi parlavano, sebbene adulterata."

Concerning the moral and physical history of the natives of the Philippine archipelago, the following are the best accounts I have been able to collect.

The above mentioned Abbate Bernardo de la Fuente resided in the "Island of Negroes," one of the Philippines, so named from the native black people. He gives the following interesting account of them.

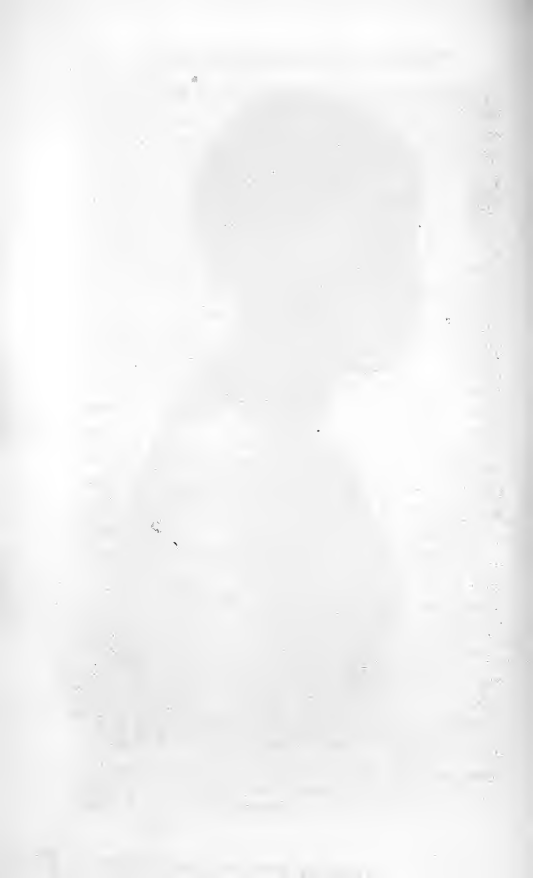
"The Negroes of the Philippine Islands are of two races. One of them is supposed, in these countries, to be descended from the Malabars or Sepoys, because, although their skin is perfectly black, their hair is long, fine, and glossy, like that of other Indians, and their countenances are not deformed in the nose and lips, as those of the Negroes of Guinea: these people, whether in a state of slavery or freedom, are tolerably civilized in their manners. There is another race of Negroes

termed Aïgta, who wander about dispersed among the mountains: these have somewhat of the deformity of features, and they have crisped hair, like that of the natives of Guinea. Of these Negroes some are found in the Isle of Luzon,* and they are very numerous in the "*Isla de los Negros*, of which they suppose themselves to be the original inhabitants."—"The said race of Negroes seems to bear upon themselves the malediction of heaven; for they live in the woods and mountains like beasts, in separate families, and wander about, supporting themselves by the fruits which the earth spontaneously offers to them; it has not come to my knowledge that a family of these Negroes ever took up their abode in a village. If the Mahomedan inhabitants make slaves of them, they will rather submit to be beaten to death, than undergo any bodily fatigue; and it is impossible, either by force or persuasion, to bring them to labour. Not far from my mission at Buyunan, in the island De los Negros, there was a horde of Negro families, who had traffic with some barbarous Indian people, and were by these given to understand that I counselled them to receive baptism, in order that the government might force them to pay the tribute; in consequence of this I could never reclaim one of them, and I believe that very few Negroes have been converted; for

* The annexed figure of a girl of the Isle of Luzon, (see Plate 7.) which displays the character of this race, is taken from M. Choris's work above cited.



GIRL OF THE ISLE OF LUZON



I only found the name of one in a register containing the baptisms of two hundred years. I ever maintained with these Negroes a gentle and friendly intercourse, hoping that the grace of the Lord might fructify in their hearts, and I began to discover that they trusted me and obeyed me in many particulars." He adds that their language was the Boholan, and that they were supposed to descend from African Negroes: a conjecture of as little weight as that which derives the other race of straight-haired black people from the Malabars. The same writer was informed, that in the interior of the island were Negroes with perfectly red eyes, who were cannibals, but he never saw any of them.

The other tribes of people in the Philippine Islands are of very different descriptions from either of these Negro races. They resemble the Sumatrans and Macassars in person, as well as in language and manners. They are a robust, well-made people, fair, but inclining to copper-colour, with flattish noses, and black eyes and hair.* We have an account of the natives of Mindanao, who probably resemble the rest, drawn by the acute and accurate Dampier. He observes, that Mindanao and St. John's Isle are the only ones in all the groupe not subject to the Spaniards. The people of Mindanao are under several princes, and speak different languages, but "are much alike in colour, strength, and stature." They are all or mostly

* Marsden. Hist. of Sumatra.

Mahomedan, and similar in manners. Besides the proper Mindanayans, who are the greatest nation, there are the Hilanoones, or the mountaineers, the Sologues, and the Alfoories. The Alfoories are the same with the Mindanayans."

"The Mindanayans, properly so called, are men of mean statures, small limbs, straight bodies, and little beards; their faces are oval, their foreheads flat; with small black eyes; short, low noses; pretty large mouths; their lips thin and red; their teeth black, yet very sound; their hair black and straight; the colour of their skin tawny, but inclining to a brighter colour than some other Indians, especially the women."—"They are endowed with good natural wits, are ingenious, nimble, and active, when they are minded, but generally very lazy and thievish, and will not work except when forced by hunger."

This may be considered as a description of the Tagalan and Bisayan inhabitants of the Philippine Islands in general.

The Malays had formed commercial intercourse with the Philippine Islands before the discovery of these islands by Magalhaens, and a part of the native people, particularly of Mindanao, had adopted the manners and religion of that race. But in still earlier times the Tagalos had received a portion of that sort of culture which had spread itself through the Indian seas. They are in possession of the art of writing, and it is said that their

alphabet resembles those of the Battas and Bugis.*

There can be no doubt that these people are of the same origin as the various nations of the Indian islands, from which the Battas and Bugis descend. It has been asserted that the Pampangos came originally from the Maldivian Isles, and settled first at Borneo. Le Gentil says, that the Bisayos and Pintados are of the same origin as the Macassars.

Some tribes of Tagalos, probably in the interior, had the practice of tattooing their skins, and marking their bodies of divers colours, and used other rude modes of ornament common to the islanders in the Pacific Ocean.† The Bisayos also had similar practices.‡ Hence these islanders were termed by the Spaniards Pintados. The superstitions of these rude tribes resemble those of the Otaheiteans and New Zealanders. They worship the spirits of their deceased ancestors, terming them Anitos: which are evidently the Eatooas of the Pacific islands.

SECTION VI.

Of the Ladrone or Marian Isles.

THE Ladrones, or Marianas, should rather be reckoned among the groupes of the Pacific Ocean than of the Indian seas, but we prefer to notice them in this place, because it appears that they

* Dr. Leyden. † Marsden's Sumatra, p. 302.

‡ Le Gentil, *ubi supra*.

were peopled by the Tagala race of the Philippines. This is clear from the accounts given by the Spanish missionaries in the Ladrões. According to Le Gobien, the language of the Ladrões, and the customs and manners of the people had much resemblance to those of the Tagalos, and the missionaries availed themselves of this circumstance in their attempts to convert the Marian islanders, by introducing a colony from the Philippines. On the other hand, the race of Tagalos in the Ladrões approximates to the New Zealanders and other Polynesian tribes in many remarkable points. They term the manes of their ancestors, which become the objects of worship, Anitos; these are the Eatooas of the Polynesians: their notions respecting the fate of the soul are similar to those of the New Zealanders, who believe, according to Cook, that if a man is killed by his enemies, in which case his flesh is eaten, his soul is doomed to eternal fire; but that if he dies a natural death, it goes to the habitation of the gods. The same divisions of society subsist in the Ladrões, as in the Philippine Islands and among the Polynesian tribes, and the chamorris, or chiefs, have a similar authority over the inferior class. To complete this parallel we need only mention that the barbarous societies which the Otaheiteans name Arreoyo, or Erreeos, are found also in the Ladrões, where they are termed Urritos.*

* See a note by the editor of Cook's last voyage, vol. ii. p. 158, containing a variety of particulars, extracted from Father Le Gobien's History of the Ladrões, or Marian Islands.

The people of Guahan, one of the Ladrone islands, are described by Dampier to be a stout, well-made race, with large and strong limbs. They are copper-coloured, and have long black hair, and small eyes. Their noses are pretty high, and their teeth tolerably white.*

SECTION VII.

Of the Moluccas.

THE Tarnate or Molucca language is supposed by Dr. Leyden to be an original tongue.† Captain Forrest informs us that the inhabitants of these islands are of two sorts, viz. “the long-haired Moors, or rather Moslem, of a copper colour, and like the Malays in every respect, and mop-headed Papuas, who inhabit the inland parts.”‡

SECTION VIII.

Of the other Indian Islanders.

SEVERAL other languages are spoken in the islands of the Indian Archipelago, of which it is needless to make a minute enumeration. A variety of dialects, or perhaps distinct languages, are found in the chain of islands extending from Java to Timor. It is said that there are five languages in the island of Sambawa; a great number in Ende and Flores, and not less than forty

* Dampier's Voyage.

† Dr. Leyden, *ubi supra*, p. 216.

‡ Forrest, Voyage to New Guinea.

among the scattered population of Timor.* But the latter are chiefly prevalent among the barbarous races in the interior. In several of these islands the same race of people who are scattered through the Pacific have been recognized. Captain Cook remarked that the dialect of Prince's Isle, near Java, resembled the Polynesian idioms. He made the same observation on the dialect of Savu, near Timor.

The natives of these islands are a darker coloured people than those of the northern and larger islands in the Archipelago. The inhabitants of Savu are of a dark brown colour, with black hair.† Dampier informs us, that the people of Timor and Anabao are "Indians of a middle stature, straight-bodied, slender-limbed, and long-visaged; their hair is black and lank, and their skins of a swarthy copper-colour."‡ I apprehend that the natives of these islands belong chiefly to the second description of people mentioned at the introduction to this chapter, I mean the black races, with straight, lank hair.

* Crawford, vol. ii. See Vocabularies in Raffles's Hist. of Java, Appendix.

† Cook's Voyage, in Hawkesworth's Collection.

‡ Ibid.

* Dampier's Voyage.

† Dr. Leiden, who sailed in 1791, in the *Porpoise*, Voyage to New Guinea.

CHAPTER VII.

Of the Races of People inhabiting the Islands in the Western Indian Ocean, or Indo-African Seas.

SECTION I.

General Remarks.

WE have now to give some brief account of the native people found in some islands in the Western Indian Ocean, or Indo-African seas, if so they may be termed. The particular islands or groupes we shall mention are the following. 1. The Nicobar Islands. 2. The Andaman Isles. Both of these groupes lie to the northward of Sumatra, in the bay of Bengal. 3. The Maldivian Isles are further westward; and 4. Lastly, the Isle of Madagascar, where it is well known that decided vestiges of the Polynesian language are to be found.

SECTION II.

Natives of the Nicobar Islands.

THE Nicobar Islands are at no great distance from the northern extremity of Sumatra. They are but thinly peopled, and some of them are desert. The natives of these islands are very little known; they live chiefly on the sea shore in villages, except in the great Nicobar Island, where a race of men is said to exist in the interior different from the rest in colour and manners; these are supposed to be the aborigines, but we have no further accounts of them.

Besides these unknown aborigines the Nicobar Islands appear to contain inhabitants who are of

different races. One of these resembles the people of Pegu and other Indo-Chinese countries; others are described to us as more like the Malays.

Of the race derived from the Indo-Chinese we have an account by Fontana in the third volume of the Asiatic Researches, who thus speaks of them.

The natives of the Nicobar Islands in general "are of a copper colour, with small eyes obliquely cut, what in ours is white being in theirs yellowish; with small flat noses, large mouths, thick lips, and black teeth; well proportioned in their bodies, rather short than tall, and with large ears; they have black, strong hair; the men have little or no beard; the hinder part of their head is flat and compressed; they never cut their nails, but they shave their eyebrows. They wear round their waists a cloth made of the bark of a tree, with one end hanging down behind, a peculiarity which doubtless gave rise to the report of a race of tailed men in these islands.

This description, which so remarkably coincides with that of the Indo-Chinese race on the neighbouring continent, can only belong to a part of the natives of this groupe. Dampier has described the Nicobar people, probably those of some other islands, as "tall, well-limbed men, with handsome features, and of a dark copper-colour."* Their language was different from all others he had heard, but contained some Malayan words.

Several vocabularies have been collected of the language or languages spoken in these islands.

* Dampier, i. p. 479.

From these it appears, as far as the matter can be ascertained, that the population must be chiefly derived from Pegu, or some of the neighbouring countries,* and not from the race which furnished inhabitants to the Indian Archipelago.

SECTION III.

Natives of the Andaman Islands.

ON the Andaman Isles, in the sea of Bengal, an aboriginal race is still found, which has been defended by a difficult access, and by the terror of a ferocious character, from intercourse and disturbance. These islands have been described by Lieutenant R. H. Colebrooke and by Mr. Symes. They are covered with woods, which contain no quadrupeds except wild hogs, monkeys, and rats. The natives are not more favoured in the conformation of their bodies than they are in the endowments of their mind. In stature they seldom exceed five feet; their limbs are ill-formed and slender, their bellies protuberant; they have high shoulders and large heads; and, like the Africans, they have woolly hair, flat noses, and thick lips; their eyes are small and red; their skin of a *deep sooty black*, while their countenances exhibit the extreme of wretchedness and ferocity. They go quite naked, and daub themselves over with mud to keep off the insects, and fill their woolly hair

* The scanty information existing on this subject may be seen collected by Adelung, Mith. i. p. 588. See also an account of the Nicobar Islands by Fontana in his third volume of Asiatic Researches, and Lieutenant R. H. Colebrooke on the Islands Nancoury and Comarty, in the fourth volume.

with red ochre or cinnabar. They are very ferocious, and make no attempt to cultivate the ground, but live on the accidental supplies of food which the woods and sea afford them. Their language, which is said to be a polysyllabic one, is rather smooth than guttural. Like the nations of Africa they are fond of rude dances, and they are said to have pleasing melodies.*

SECTION IV.

Natives of the Maldivian Islands.

WE have very little information respecting these Islands or their inhabitants. The Maldives extend nearly two hundred leagues in length, that is, from north to south; they lie to the south-westward of Cape Comorin and the Island of Ceylon, and are almost intermediate between the Sunda Isles and Madagascar. Arabian settlers appear at an unknown era to have made themselves masters of these islands. Their sovereign has the title of

* Compare Symes's embassy to Ava, and Lieut. Colebrooke, Asiatic Res. vol. iv., also Adelung, Mithridates, vol. i. p. 588.

It has been thought by some, that the people of the Andaman Islands are descended from runaway negro slaves, or from some Africans who might accidentally have been cast on shore from a shipwreck. But this conjecture, besides that it is unlikely in itself, is shown to be unfounded by a remark of M. Adelung, who observes that the Andaman Isles are already mentioned by that name in the Arab voyages, translated by Renaudot, as early as the year 850, which is long before the era of the Portuguese trade in slaves from Mosambique. The natives were then savages and cannibals, their physical characters were the same as now. Mr. Colebrooke has given a vocabulary of forty-one words in the dialect of the Andamaners, which proves it to be a language different from all others.

Sultan of the Maldives, King of thirteen provinces and twelve thousand isles.*

In some of their customs the Maldivians are said to resemble the maritime Biajus or Sea-gypsies of the shores of Borneo. They annually launch a small bark, loaded with gums, perfumes, flowers, and odoriferous wood, and turn it adrift at the mercy of the winds and waves as an offering to the spirit of the winds; and similar offerings are made to the spirit, whom they term the king of the sea.†

Hervas has collected some specimens of the idiom of the Maldivian islanders, which seem to shew that the native speech of these people is derived from, or at least is nearly akin, to the Bisayan of the Philippine Isles.‡

SECTION V.

Natives of Madagascar.

WE have already observed in the account of the Philippine islanders, that the Papuas in the interior are said to speak dialects of the same language as the Tagalan and Bisayan inhabitants; in fact that the negro and tawny races in these islands are not so clearly distinguished by their language

* Guyon's Hist. des Indes, cited in Mod. Hist. vol. ix. 316.

† Dr. Leyden's Asiat. Res. vol. x. p. 216.

‡ Hervas says, "Nelle Maldive i diversi gradi di persone si chiamano Tacaras, Bibis e Culo, e in Bisayo Tacus significa degno, Bebi conchiglia, (cosa molto estimata) e Calo cappello." He shews that the names of several of the isles are significant in the Bisayan, and what is more, have the same meaning as in the Maldivian language; and he adds, "I Maldivi usano i genitivi di possessione collo stesso idiotismo dei Bisayi."—Hervas, Catalogo delle Lingue, p. 122.

as they are generally supposed to be. This appears the more worthy of credit, and at the same time more remarkable, when we consider that the the great island of Madagascar contains a numerous population, chiefly consisting of woolly-haired and black tribes, whose dialects bear an undoubted resemblance to the language of the tawny and the black races in the Philippines.

All the voyagers who have visited Madagascar agree in describing it as chiefly inhabited by two distinct kinds of people, a woolly haired and a lank haired race. M. Le Gentil says : “ Il ne m’a paru à proprement parler que deux espèces d’hommes à Madagascar, toutes les deux noires, qui diffèrent seulement en ce que l’une, pareille à celle d’Afrique ou de Mosambique, est *très noire*, et a de la laine à la tête, comme on dit ; c’est à dire des cheveux courts et tres crépus ; cette espèce est en général forte et vigoureux. Les noirs de la côte d’Afrique, opposée à Madagascar, sont cependant encore plus corpulens, tant les hommes que les femmes, beaucoup plus forts et plus vigoureux : il en est de l’espèce humaine dans ces deux endroits, cependant si voisins l’un de l’autre, a peu près comme des coquilles, et peut-être comme de tous les autres animaux en général : *la même espèce* de coquille est beaucoup plus grosse à Mosambique, et le long de la côte, et plus vive en couleur quelle ne l’est au Fort-Dauphin, et le long de la côte de l’Est de Madagascar.

“ L’autre espèce humaine habite le centre, ou le milieu de l’isle ; elle n’est pas si noire que la

première ; sa couleur est plus bronzée, mais elle est surtout remarquable par de grands cheveux longs et plats qui paroissent incapables de recevoir le moindre pli ; ils en font de longues tresses, qu'ils laissent descendre bien au dessous des épaules ; cette espèce n'a point le nez écrasé : un visage et une physiognomie à l'Européenne ornent souvent un corps très bien fait." He adds, that these people who inhabit the centre of the island are termed Oves in that country. He thinks they have some resemblance to the Egyptians and to the Chinese in their features ; they are a more slender and agile, but less muscular and vigorous race than the *Negroes* of Madagascar.*

M. de Pagés describes the woolly-haired Mallecasses nearly in the same terms. He says, "they are tall and well-proportioned ; have crisped locks, large and beautiful eyes, an easy carriage, and an open and unreserved countenance. Their colour is nearly black, and differs but little from that of the natives on the Malabar coast."

But this writer differs from Le Gentil, in his Account of the Oves, or the Tawny Race. He says, "they are short and remarkably thick-set in their persons, with lank smooth hair, and an olive complexion." He adds, that they have a strong resemblance to the Malays.

Robert Drury speaks of a race of people in Madagascar different from the Mallecasses. He says their hair is neither so long nor so woolly as that of the other natives : their manners and religion

are different. They pay a superstitious reverence to the new moon, and to several animals, as lizards. They flatten the heads of children. They have, he says, a language quite peculiar to themselves, which was unintelligible to him, though he spoke familiarly and constantly for many years, the language of the Negro Mallecasses. He terms them Virzimbers, and conjectures them to be the aborigines.

Drury's account of the Mallecasses, with whom he lived many years, and of whose language he has given a vocabulary, is well known. He describes these people nearly as Le Gentil and De Pagés. He says, "some of the black women are extremely handsome and well made, their features regular, their skins soft, fine, and delicate. They do not go naked as the Guinea Negroes do."

Respecting the Oves, Virzimbers, or whatever other name may belong to them, we have, after all, very little information: they live in the interior and are scarcely known. It does not appear on comparing the accounts of them that they exhibit any proof of affinity with the Malays; nor is it in the interior of the island that we should look for the descendants of casual settlers from remote parts. They may be the relics of some very ancient race, perhaps of Egyptian or Abyssinian origin. The people principally described by voyagers are the Negroes; the latter form the great mass of the Madagascar population, and they are the race generally spoken of under the name of Mallecasses or Madecasses. Le Gentil says, in reference to the different tribes or nations of this country

known to foreigners: "La couleur est la même partout, et la figure ne diffère point essentiellement."

Many specimens have been collected of the language of Madagascar. Among these is a vocabulary appended to the narrative of Robert Drury, who lived among the Negro Mallecasses so long as to become familiar with their speech. There are also several specimens of the Oratio Dominica, which must have been taken from the speech of the woolly-haired natives, since it is with them principally that intercourse has been maintained by Europeans. In both of these there are clear proofs of affinity with the language of the Indian Archipelago. It has been commonly said that the idiom of Madagascar resembles that of the Malays, but it appears in reality to be much more nearly allied to the dialects of the Philippine islanders, termed Tagala and Bisaya.*

* The following table, containing the numerals and a few other words, in several of the Papua as well as of the Polynesian languages, will afford some evidence of their mutual connexion.

NUMERALS.

	Madagascar.	Philippine I.	N. Guinea.	Tanna.	Mallicollo.	N. Caledonia.	Polynesian.
1	Isa . . .	Isa . . .	Oser . . .	Ret-tee . . .	Tsee-kace . . .	Par-ai . . .	Ro-tahai. (E.)
			Tika. . .				A-tahai. (O.)
2	Rooce . . .	Ruha } (B.)	Roa . . .	Ka-roo . . .	E'ry . . .	Par-Roo . . .	Rooa. (E.)
		Duha . . .					E-rooa. (O.)
3	Telo . . .	Tolo (B.) . . .	Tola . . .	Ka-har . . .	E'rei . . .	Par-Ghen . . .	Ka-Tarron.
							Toloo. (T.)
4	Effat . . .	Apat (T.) . . .	Fatta . . .	Ha Fa . . .	E'bats . . .	Par-Bai . . .	T'Fa. (T.)
5	Lime . . .	Lima . . .	Lima . . .	Ka-rirrom . . .	E'reem . . .	Par-Nim . . .	Ereema. (O.)
							Ka-reema.
6	One . . .	Onon (B.) . . .	Onim . . .				A-ono. (O.)
	Enning . . .	Anim (T.) . . .					Hono. (E.)
7	Heitoo . . .	Pito . . .	Fita . . .				Fida. (T.)
							A-heitoo. (O.)
8	Balloo . . .	Valo . . .	Wala . . .				{ Varoo.
	Walou . . .						{ Wolo.
9	Seeva . . .	Siyam . . .	Siwah . . .				Seewah.
1	Foolo . . .	Polo . . .	Sanga . . .				{ Sapooloo.
		Sang pouo . . .	foula . . .				{ Anga-hoo- roo. (N.Z.)

SECTION VI.

Concluding Remarks on the Population of the Islands in the Indian Ocean.

It is very difficult to account for some of the facts which present themselves in the history of these Islanders. The relation which exists in the dialects of Madagascar and the Philippines, is in itself a remarkable circumstance; and it becomes more singular when we consider that the Bisayan language of the Philippines, and the idiom of the Mallecasses, are spoken in these two

The Madagascar vocabulary contains words in the language of the woolly-haired Mallecasses.

The column entitled Philippine Islands, includes words in the Bisayan and Tagala dialects, and some in that of Abac, all marked with the respective initials.

The column of Polynesian contains generally the dialects of the Marian Isles, Otaheite, Easter Island, New Zealand, and Tonga Isles, marked by initials.

Words.	Madagas- car.	Philippine.	Marian.	Tanna.	Malli- collo.	N. Cale- donia.	Otaheite, &c.
Sky	Langitchs	Langit	Languit				Erae,
Earth	Tonna	Tuna Yuta (B).	Tanaa	Tana			Euta. (O.)
Water						Ovee	Avy (O.) Evy. (E.)
Teeth	Neefa	Ngipin (B.) Ngipon (T.)	Nifin				E-nihio. (O.) Nihio. (E.)
Name	Andro	Arao. (T.) Adlao (A.)	Adao				Era. (O.)
Coco-nut	Anghara	Ngalan					Neole (Rejang.) Ecop. (T.)
Moon	Voler	Bulan	Pilan				Marama. (O.)
Head	Laher	Olo	Ilon				Opo (O.) Opo. (E.)
Eyes	Moffa	Mata	Matan		Maitang		Matta. (O. E.)
Hog	Lam-bo	Babai		Booa	Brooas		Booa. (O.)
Bird		Manne	Manna	Manoo		Maneek	Mano. (E.)

N. B. These words, as well as the preceding numerals, are taken from the vocabularies in Cook's Voyages, and partly from Hervas. Some of the Madagascar words are from Robert Drury.

distant points by woolly-haired nations. Unless we reject the evidence of the missionaries, whose accounts of the Philippine Islands I have cited, and who, by reason of the extensive opportunities which fell to their lot, seem worthy to be trusted, the black tribes in these islands speak Bisayan dialects as their vernacular language; I shall not repeat what I have just said respecting the Mallescasses. Both the language of the latter and the Bisayan appear to be cognate dialects, with the various idioms of the Polynesian tribes.

Perhaps further investigations may throw light on this subject, but at present the facts known would lead us to suspect that the physical diversities of these races are not so permanent distinctions as many have supposed, and that the Papua and Tawny races may be more nearly allied.

If we suppose the island of Madagascar, and the others between it and India to have been peopled by the same race which spread itself over the the Indian Archipelago, in which direction it is probable that the colonization proceeded? Was Madagascar the original centre of migration, the native country of the whole race? Or did the stream of population flow in an opposite course? On this subject it is difficult to determine any thing. A more accurate acquaintance with the languages and the inhabitants of the Philippine Isles, and of Madagascar, may perhaps at some future time throw light upon it.

CHAPTER VIII.

Physical Observations on the Races of Men surveyed in this book, considered comparatively and separately.

SECTION I.

Comparative Observations on the Papua and Polynesian Races.

WHATEVER may be thought of the relation between the Papua and the Polynesian tribes, it really appears that they have some remarkable characters in common. I am not now speaking of their languages, a point which was adverted to in the last chapter. The reader may explain as he can the fact, that the Mallecasses in Madagascar and the Negritos of the Philippine Islands really speak dialects of the Polynesian language; a fact which can hardly be denied, since it rests on the evidence of several individuals who have resided many years among the respective nations. On any inference from this fact, I do not insist. I shall now point out some instances of physical resemblance between these races of men, whom most writers very strongly distinguish from each other.

I have already mentioned the principal observations which have been made, relative to the structure of the head in the Australian and Papua

races. Blumenbach has figured the skulls of two New Hollanders, which, he says, agree between themselves in all important particulars, and likewise bear a marked resemblance to an accurate figure of a Papua, drawn by Cornelius De Bruin.* In his third decade he has represented two skulls as illustrating the fifth variety of the human species, which is, according to his observations, intermediate between the Negro or Ethiopian, and the European. These are the skulls of a New Hollander and one of an Otaheitean. The Australian agrees entirely in all the principal characters with the Otaheitean. It only differs in having the bones of the bregma rather less protuberant; whence the skull is rendered somewhat narrower, and in this respect more approximating to the Negro. The primary characters of the Otaheitean skull are as follows:

“The skull moderately narrowed; but the middle of the bregma remarkably projecting; the upper jaw somewhat prominent; the middle of the forehead and vertex, where the sagittal suture runs, distinguished by an elevated ridge; the superciliary arches very tumid.”† In the fifth decade the same writer has figured the skull of a native of the Marquesas: this, he says, resembles the Otaheitean in every leading character, but is more elegantly formed, and at the same time more compressed at the sides. The cranium of a Bugis, or native of Celebes, in the same decade, though

* Decad. Cranior.

† Decad. 3. tab. 26, 27.

belonging to a nation, certainly of the same descent as the other Polynesian tribes, is remarkable for approximating in some respects to the Negro, and in others to the Kalmuc. "The slanting direction of the face, and the prominence of the alveolar portion of the upper jaw-bone, and the oblique position of the upper teeth, render this head, when viewed sideways, not unlike that of a Negro; but, when looked at in front, it has something of the Mongolian character, in the remarkable breadth of the cheek-bones, and in the amplitude of the orbits, separated from each other by broad and flat nasal bones."*

In the drawings made by different voyagers of the heads of savages in the Southern Ocean, there is a general approach to these characters, and particularly to those pointed out in a passage before cited from Péron, as belonging to the Papua rather than to the Australian race. At the same time it must be observed, that in many of these heads the form seems to be not very different from the European.

If we refer to the account of these nations given by Dr. Forster, we may remark, that he considers them as divisible into two classes, or those termed Polynesians and Papuas, but he represents particular tribes of the one class as, in numerous instances, approximating to the other in physical characters, viz. in form, features, complexion, and in the tex-

* The figure given of this cranium in the fifth decade will be found in Plate IV. fig. 1.

ture of the hair. But some of these circumstances will occur to our notice in the following section.

SECTION II.

Of the physical Varieties which are to be found in the Polynesian Race.

THE Polynesian race displays in its several branches a greater variety in colour, form, stature, and physical organization in general, than any other single department of the human species. It cannot be determined what was the original colour of this race: I mean, what was the complexion prevalent among this people before they wandered from the common, but unknown centre of their emigration. If it was the tawny; or yellow cast of the Indian islanders, it has deviated both into lighter and darker hues. The people of New Zealand and the Sandwich Isles, those of the Tonga Isles, and, again, the inhabitants of the Society Isles, Otaheite, and the Marquesas, display a regular gradation from the darkest to the lightest complexion of this race. The complexion of the New Zealanders varies, as we have shewn, from a *pretty deep black* to an olive colour, or yellowish tinge; and the Sandwich islanders are often of a very dark brown colour. In the Tonga Islands the general complexion is of a cast deeper than the copper-brown, though some have a true olive complexion, and individuals, principally females, are much fairer. In Otaheite and the adjacent

isles of the same groupe, the most beautiful, and, at the same time, the most variable tribe of the whole race is found. "Here," says Forster, "Nature seems," in the human species, "to follow that richness, luxuriance, and variety, which we have observed in the vegetable kingdom: she is not confined to a single type or model. The common people are of a dark colour, and degenerate towards the appearance of the natives of the New Hebrides; but the better sort have a complexion which is less tawny than that of a Spaniard, and lighter than the fairest inhabitant of the East India islands; in a word, it is *white*, tinged with a brownish yellow; however, not so strongly mixed, but that on the cheeks of the fairest of their women, you may easily distinguish a spreading blush. From this complexion we find all the intermediate hues down to a brown, bordering on the swarthy complexion of the race found in the New Hebrides." "Their hair is commonly black and strong, flowing in beautiful ringlets. I saw but few with yellowish brown, or sandy hair." "But, in some instances, the decided characters of the true sanguine complexion display themselves even here." Dr. Forster adds, that a single man in Otaha had perfectly red hair, a fairer complexion than the rest, and was sprinkled all over with freckles. Captain Wallis says, that the hair was in some brown, in some red, and in others flaxen; but that in the children of both sexes it is generally flaxen." These marks of the fair, or sanguine com-

plexion, which in Otaheite are occasionally seen, appear to be almost general in the Marquesas, the inhabitants of which were thought by Captain Cook to be the finest race of people in the South Sea. "The women and children," he says in general terms, "are as fair as some Europeans. Their hair, like ours, is of many colours, except red, of which I saw none." In the accounts, however, of Mendana's voyage, who discovered these islands, it is expressly said that many of the people had red hair. It is observed that the general colour among them was almost white, and that they had in person greatly the advantage of the Spaniards.

The texture of the hair is in general like that of the Javanese, but in some instances it varies. In some of the New Zealanders it is curling: the Tonga and Sandwich islanders have occasionally bushy and frizzled hair.

The features of the Otaheiteans are more soft and delicate, but appear to have a general resemblance to those of the islanders near the Indian continent. The face of these people is said to be handsome, but their noses somewhat flat. In the Tonga Isles there are hundreds of truly European faces, with aquiline noses. The most general trait in the whole race is a fulness of the nostrils, which reminds us of the *bottle noses* of the New Guinea Negroes.

On the whole it may be concluded that we have here found an instance which displays almost every variety of features and complexion discovered in

the human species, within the limits of one race. These varieties are here so blended, and they appear under circumstances so clearly identifying the race, that we are prevented from falling into a suspicion, which would otherwise arise, that these different kinds of people are of distinct families. If their mutual separation were somewhat more broadly marked, this hypothesis would have been forced upon us. As the case is, it would be scarcely more absurd to assert, that the natives of London and Edinburgh are distinct species of men, than to maintain a similar pretence with respect to the New Zealanders and Otaheiteans.

SECTION III.

Of the variations which are discovered in the Papua and Australian races.

RESPECTING the Papua and Australian races several observations occur which are nearly parallel to the preceding. If we survey the whole class of nations collectively, we find among them a great variety of form and colour, and these diversities blended together in every way. The woolly-haired people are scattered promiscuously among tribes of straight or lank hair. Tribes bordering upon each other, and so nearly resembling, that if it were not for this circumstance they would be considered as branches of one nation, are distinguished solely by the texture of the hair, which is in some quite woolly, in others perfectly lank. In other instances it has an inter-

mediate character, as in New Caledonia, where it is rough and bushy, and presents such an appearance that some voyagers have pronounced the New Caledonians to be a woolly-haired race, while others have positively asserted the contrary. If we select either the woolly or the lank haired tribes for examination, we shall find among each class great diversity of complexion as well as of form. Some woolly-haired people are black, others copper-coloured. Among the lank haired there is a still greater variety. Some are of a sooty black; others, even in the same tribe, of a light tawny colour. The hair varies also in its hue.

In these remarks I have referred to the more general characters of the different races, in which a gradual transition is found from one extreme of each kind to the opposite, without any wide or distinct interval. But it is still more important to notice those variations which exist within the limits of one tribe or nation, and seem to spring up, as it were, before our eyes. Such are to be found among the black races, though not in so great a degree as in those tribes of people whose modes of existence are less uniform, whose growth is more developed by plentiful nourishment, and in whose physical organization Nature seems to have energy to luxuriate in the production of new varieties. Among the natives of New Holland the complexion varies from a black to a light tawny colour. In Tanna the people are generally

of the same swarthy colour as the New Caledonians, who are said to resemble the natives of Van Diemen's land; but some individuals have a clearer complexion, and in these the tips of their hair are of a yellowish brown colour, a peculiarity which is common to them and the Otaheiteans. Several instances occur in which the hair varies in its texture; in different individuals of the same island, and as far as it can be known, of the same race, it is woolly and frizzled; or only rough and bushy; or straight, or soft and curling. Great varieties also occur in the features, as well as in the stature and form.

SECTION IV.

Remarks on the physical varieties of all these nations collectively. Inferences from them with respect to the origin of national varieties. Relation to climate.

IF we view these races together, they appear to furnish sufficient proof, that the utmost physical diversity presented by the human frame in different nations, may and do arise, from an uniform stock. They enable us to produce actual facts as examples of this deviation. We cannot, indeed, take all the steps at once, but we can go the whole of the way by degrees. The black race of New Hollanders does not deviate into the lightest hues, but it attains a middle degree; for the fairest Australians, though of tawny colour, are of a much lighter shade than the darkest of the Polynesians. Among the latter all the re-

mainder of this gradation is easily filled up. If a few of the fairest New Hollanders were separated from the community, and placed on an island by themselves, they would form a race of lighter colour than the New Zealanders. Under favourable circumstances, would not this new stock deviate into still lighter shades, as the race of New Zealand, or its kindred in the Society Isles, has done? That this would happen seems scarcely doubtful; and if it be probable that such a consequence would ensue from a contingency which must often have taken place in the history of the world, this seems to evince that the diversities of colour in mankind are not necessarily original differences. This observation holds equally, whether we suppose the blackest complexion in the race to be the primitive one, or take the alternative, or as sume that the original colour was an intermediate hue. What has been said of colour may be applied also to varieties of form, and to other physical peculiarities.

The influence of climate on the colour and organization of mankind, is another inquiry which the history of the great insular races might be expected to elucidate. With respect to the Polynesian tribes, it has been remarked by Mr. Marsden and Mr. Crawford, that the heat of climate seems to have no connexion with the darkness of complexion. The fairest nations are, in most instances, those situated nearest to the equator. If we inquire into the history of the Papua and Australian tribes, with rela-

tion to this point, we shall find that the complexion does not become regularly lighter as we recede from the intertropical clime; for the people of Van Diemen's land, who are the most distant from the equator, are black; but we observe, that the occasional deviation to light hues, chiefly displays itself in temperate regions, as in New Holland, among the tribes in the neighbourhood of Port Jackson. We may also remark, that in New Guinea, just under the equator, the Papua race is in its vigour; the black men are tall, athletic, of huge limbs; in the temperate countries to the southward, which, though inhabited by black aborigines, may be reckoned parallel, with respect to temperature, to many countries in Europe, the natives are puny and dwindled; the New Hollanders are represented by voyagers as some of the most abject and miserable of the human species.

BOOK V.

**SURVEY OF THE PHYSICAL HISTORY OF PARTICULAR
RACES, CONTINUED. PART III. HISTORY OF THE
INDO-EUROPEAN NATIONS.**

CHAPTER I.

Introductory Remarks.

It is now well known that a greater or less degree of affinity exists between the dialects of some nations in the south-eastern parts of Asia, and the most extensively spread and most cultivated languages of Europe. By this affinity is not meant a resemblance of some particular words in the vocabularies of several nations, such as a casual intercourse may have occasioned, but that sort of analogy in the primitive words and grammatical structure, which requires a different explanation, and is supposed plainly to indicate those languages in which it is displayed, however they may differ in some respects, to have sprung from a common original. This analogy has been remarked more especially between the Sanscrit, or the ancient language of India, and the Greek, Latin, and German. By some the term of Indo-European, by others that of Indo-German dialects, has been applied to the whole class of idioms which are

found to be thus allied. The former of these terms is preferable to the latter, and indeed, to any other, as being the most general, and at the same time free from any hypothetical allusion.*

The study of philology has been heretofore pursued in so vague a manner, and so many visionary speculations have been raised upon casual or partial resemblances, sometimes upon uncertain etymologies, that many persons of sober judgment have been inclined to distrust all conclusions respecting the history of nations which are founded upon analogies in language. Within, however, a comparatively short period, a class of writers has arisen, who have vindicated this pursuit from the obloquy which formerly lay against it;† and it seems now to be the conviction of all

* Schlözer has proposed to term this class of languages *Japetic*, in imitation of those philologers who have given the appellation of Semitic to another class. (See Schlözer von den Chaldäern, in Eichhorn's Repertorium für biblische und morgenländische literatur. Th. 8.) The nations who speak the Indo-European dialects might, I believe, be termed Japetic with fully as much propriety as the other class are termed Semitic, but both these designations are objectionable. The term Indo-German is adopted by Klaproth. The German philologers do not appear to be aware that the Celtic dialects belong as decidedly to the same stock as the German. This at least was the case with F. Schlegel, when he wrote his work, "Über die sprache und weisheit der Indier." On the whole, the term Indo-European is preferable to any other. It was first used, as far as I know, in the Quarterly Review, by the author of a critique on Adelung's Mithridates.

† I allude particularly to such writers as Mess. J. C. Ade-

well-informed persons, that the analysis and comparison of languages is the most important resource we possess for distinguishing mankind into different families, and for determining the degrees of relationship which exist between them. For this purpose a superficial comparison, extending only to a given number of words, is not sufficient: it is requisite that the grammatical structure of each dialect should be carefully analysed, and compared with that of others; and it is only when an extensive agreement can be proved to exist in the grammatical forms, in addition to numerous coincidences in the primitive words, including the roots and the terms employed to express natural and universal ideas, that any two languages can be safely considered as cognate dialects.

When, however, this conclusion is fully established, and it is no longer doubtful, that the languages of several nations are really dialects of a common mother tongue, it must be allowed in general that the nations themselves are probably descended from a common origin. There have, indeed, been instances in which new idioms have been imposed upon conquered nations, who have gradually lost their original speech, and thus two races of different descent have been found to speak the same or similar dialects; but these are rare events: the particular circumstances and conditions under

lung and Vater, author of the *Mithridates*; Fred. Schlegel; Fr. Bopp; Julius Klaproth; and, in this country, Professor Murray and Dr. Jamieson.

which they have taken place, can hardly have existed without leaving vestiges plainly discoverable; and the presumption is very strong against such a supposition, unless supported by circumstantial and historical proofs.

In the class of Indo-European nations I shall include all those races, and those only, whose languages are allied in the manner and degree above indicated, and display, when accurately compared, that sort and degree of relationship which entitles us to regard them as descendants from a common original. The nations belonging to the class thus limited, may be divided between the following branches:

1. The Indian, including all those nations who speak dialects of the Sanscrit.
2. The Persian, comprising the proper Persians, as well as many nations within the limits, or on the borders of the ancient Persian empire.
3. The Pelasgian, under which name I venture to include the Greeks, the old Greek and Latin population of Italy, as well as some nations of Asia Minor, who appear to have been allied to the same stock.
4. The Celtic race.
5. The German race.
6. The Slavonic race.

Each of these departments comprises nations, who though once nearly allied, and probably having a common speech, have now become, through the effect of long separation, quite unintelligible

to each other, their languages requiring investigation, in order that the affinity between them may be discovered. Such is the case of the English and Germans, and such was undoubtedly that of the Greeks and Romans.

The history of the principal nations belonging to this class will be surveyed in the following chapters of this book, but not exactly in the order above pointed out. I shall offer, as I proceed to the different parts of this outline, some remarks on the several races, which, blended together, have furnished population to particular countries. These do not all appear to have been of Indo-European origin. The Indo-European nations, though dispersed long before the era of authentic history, were not in all the countries of Europe the first inhabitants. In some places vestiges appear of a more ancient people; and in order to form some idea of the extent of these aborigines, or older inhabitants, and to distinguish them from the races who have dispossessed them, we must endeavour to collect some historical notices of the population of each country by itself.

CHAPTER II.

Of the People of India.

SECTION I.

Remarks on the History of the Hindoos, their Language, and Origin.

THE Jews, the Chinese, the Egyptians, have been celebrated for the permanent character which they have maintained for a long course of ages. But, perhaps, there is no nation which has undergone so little change during the lapse of many centuries as the Hindoos. Whatever may have been the causes which gave origin to the institutions of this people, to their subdivisions into tribes and castes, of distinct habits and professions, which the parents are destined to transmit without change to their progeny, the whole system, contrary as it is to nature and common sense, has subsisted already, with very little alteration, for more than two thousand years. At the time when Megasthenes visited the court of Palibothra, the Hindoos were just the same kind of people as they are at present. It is scarcely possible to find any circumstance in the description of Indian society, by this writer, or rather in the abstracts which Diodorus, Strabo, and Arrian, have given us of his account, that does not exactly agree with the customs now pre-

valent in Hindoostan.* But this is a subject in which we are not at present interested, except in so far as it is connected with an hypothesis which some persons have set up, in order to account for the peculiar character of the Indian population. This hypothesis would lead to some important results as to the origin of the Indian people and the nations connected with them, and it therefore requires consideration in this place. Those who adopt it suppose that the system of subordinate tribes and castes, which distinguishes the social state of the Hindoos, has been the result of repeated conquests: that the Brahmans, for example, were the posterity of some victorious race, who, having subdued the native people of Hindoostan at an unknown but very distant period, reduced them to a lower rank in civil rights: a similar revolution is conjectured to have taken place previously, when the Chatriyas subdued the Sudras, and at a still earlier time, when the Sudras conquered the Parriahs; and thus the existence of different grades, one elevated above the other, is accounted for.†

* See Dr. Vincent's Perplus of the Erythrean Sea, where the accounts of Megasthenes are analysed and compared with the present state of India. "I have ventured to offer some observations on this subject in my analysis of Egyptian Mythology, book iv. chap. iii. note, p. 397.

† Herder's remarks on this subject are highly deserving of attention. He says, "Die eintheilung der Indischen nation in vier oder mehrere stämme, über welche die Brahmanen als erster stamm herrschen, verdient eine besondere betrachtung. Dass

To this opinion it has been objected, and apparently with good reason, that there is a wide difference between the institutions of the Hindoos and the feudal and military customs of warlike nations. The authority and elevated dignity of the Brahmans is founded solely on opinion, and not on arms: although the highest in political influence, they are not the armed or royal caste: kings and warriors spring from another race. This would hardly be the case, if the predominance of the sacred order were the result of successful warfare; and this circumstance rather leads us to suppose their power to have been acquired by the gradual influence of priestcraft and policy. Even in tradition the Brahmans make no appeal to the right of conquest, nor is there a trace in their history of any such event. Their most ancient poems, their code of laws, and cosmogony, all agree in representing them as an indigenous order entirely belonging, and ever peculiar to the Hindoo people.* A similar observation applies to

ist erode betavels eno asbery thereflit to soneter sie diese herrschaft durch leibliche unterjochung erlangt hätten, ist nicht wahrscheinlich; sie sind nicht der kriegerrische stamm des volks, der, den könig selbst eingeschlossen, nur zunächst auf sie folget: auch gründen sie ihr ansehen auf keins dergleichen mittel, selbst in der sage—"nach welcher sie als ein eingebohrner stamm, als haupt zum körper der nation gehören: u. s. w." Herder. Ideen zur philosophie des geschichte, &c. ii. p. 25.

* By this they distinguish themselves from the M'lechas, or barbarians, without castes.

Brahma is said to have been the chief minister of Crishna.

Brahma

other tribes in the Indian community. They are all spoken of as parts of the same nation, children of the same fabulous progenitor; nor is there any thing, either in their physical character, language, or habits, sufficiently discriminating to enforce or even to accord with the supposition, contradicted as it is by their own history, that the Brahmans and Cshatriyas originally were of different races from the labouring Sudras, or even from the out-cast Parriahs.*

If it be concluded that the Brahmans were not
Brahma was the inventor of the Indian laws and arts; by the son of Crishna the castes are said to have been established.

See also Dow's Hist. of Hindostan, vol. i.; Menu's Institutes, by Sir W. Jones; and various portions of the Puranas in the Asiatic Researches.

* There is indeed a tradition that the Parriahs of Karnataca were once an independent people, and that one of the Banawassi kings, who reigned 1450 B. C., conquered the Parriah king Hoobaseia, and reduced his people to their present state of slavery. (Wilks's Hist. of the Mysore, vol. i.) But this, if true, was a local event. If it were allowed that the Parriahs, or out-casts, descended from a different nation from the Hindoos, though resembling them in person and language, still this would remain a very improbable supposition with respect to any of the castes included in the four great tribes. In the southern parts of the peninsula, as well as the north of Hindoostan, the subdivision of these tribes, and the regulation of the castes, is represented by the Indian history and tradition as primeval; and as the institution of the gods at the first population of the country. See "Historical Remarks on the Coast of Malabar," (Asiat. Res. vol. v.) particularly an account of the origin of the castes of Malabar, from the book intituled "*Kerul Oodputtee*, on the emerging (from the sea) of the country of Kerul."

originally a band of conquerors or a foreign race, but descended from the same stock as the rest of the Hindoos, and only a body elevated from the community by favour of political circumstances; their classical idiom, the Sanscrit, must be looked upon, not as a learned dialect introduced into Hindoostan by a tribe of foreign blood, but as the proper language, though somewhat modified, of the native people of India. That the classical Sanscrit was ever spoken in its greatest purity by the lower castes is not to be imagined; but it appears that this language must have been an adorned and refined dialect, derived from the common speech of that race from which the Brahmans as well as the Sudras had their origin.*

This inference, which can only be evaded by having recourse to the most improbable conjectures, leads to a conclusion very important as to the history of the Indian race, and indeed of the Asiatic nations in general. If the Sanscrit, or a cognate dialect, was the native language of the Hindoos, it seems to follow that this race descended originally from a common stock with the Pelasgi, the Teutonic nations, and many other tribes of various complexions and features in Asia and Europe. For it is well known that the affinity which has been observed to subsist between the Sanscrit,

* I do not mean to include among the Hindoos all the nations of India, but chiefly apply that term to the people of Hindoostan; or rather to all who speak dialects of the Sanscrit, with little intermixture.

the Greek, the German, and other languages, is not of such a nature as to be explained by referring it to accidental intercourse between nations already formed. It not only prevails through a great proportion of those words which denote the most universal objects, and are expressive of the most common and simple ideas, but extends even to a fundamental and evidently primitive analogy in grammatical forms. Those who have examined this subject with the greatest care and attention appear to be unanimous in the opinion, that the analogy between these languages clearly evinces them to have sprung from a common origin, and therefore it must be concluded that the races of people to whom they belong, have been branches of the same stock. As the proofs of this position may easily be obtained by those who are desirous of investigating the subject, I shall merely cite at present some well known writers, to whose authority it seems sufficient to refer.* The following observations I take the liberty of inserting in the original words of the author.

“Das alte Indische *Sanskrito* d. h. die gebildete oder vollkommne, auch *Gronthon* d. h. schrift-oder büchersprache, hat die grösste verwandtschaft mit der *römischen* und *griechischen*, so wie mit der *germanischen* und *persischen* sprache. Die Aen-

* See particularly “BOPP über das Conjugationssystem der Sanscrit-sprache, in vergleichung mit jenem der griechischen, lateinischen, persischen und germanischen sprache,” and “F. SCHLEGEL über die sprache and weisheit der Indier.”

lichkeit liegt nicht bloss in einer grossen anzahl von wurzeln, die sie mit ihnen gemein hat, sondern sie erstreckt sich bis auf die innerste structur und grammatik. Die uebereinstimmung is also keine zufällige, die sich aus einmischung erklären liesse; sondern eine wesentliche, die auf gemeinschaftliche abstammung deutet. Bei der vergleichung ergiebt sich ferner, dass die Indische sprache die aeltere sei; die andern aber jünger und aus jener abgeleitet.*

The particular facts from which this result is deduced will be noticed in the sequel of the present book. I now proceed briefly to survey the history of the Indian race, and its subdivisions into particular nations.

SECTION II.

Of the Dialects of the Indian Language, and the Subdivisions of the people into different Nations.

THE Hindoos, or the people of India, are divided into several nations, which for many ages have been subject to different governments; and although still bearing many traits of mutual resemblance, have become very distinct from each other in manners, person, and language. These differences may be attributed in part to political separation during a long course of years, partly to difference of climate and local situation, and the diversity of habits connected therewith; and perhaps in a few instances, though in a degree not to be cor-

* F. Schlegel, über die sprache und weisheit der Indier.

rectly appreciated, to intermixture with some foreign races speaking languages originally distinct. The only way of obtaining a correct idea of the nations into which the whole race of Hindoos is divided, is by enumerating the principal dialects which are spoken throughout Hindoostan and the Deccan. For this purpose I shall extract some remarks which I find in Mr. Colebrooke's learned Essay on the Sanscrit and Pracrit languages.

The Hindoo grammarians and critics, according to this accomplished and intelligent writer, distinguish three languages, or rather three stages of the language spoken in India; these are, first, the Sanscrit; secondly, the Pracrit; thirdly, the Magad'hi. The meaning of these terms is thus explained:—

I. “The Sanscrit language is a highly polished and cultivated tongue, which was gradually refined until it became fixed in the classic writings of many elegant poets, most of whom are supposed to have flourished in the century preceding the Christian era.” “It evidently derives its origin, and some steps of its progress may even now be traced, from a primeval tongue, which was gradually refined in various climates, and became Sanscrit in India, *Pahlavi* in Persia, and *Greek* on the shores of the Mediterranean.” “It has nearly shared the fate of all ancient tongues, and is now become almost a dead language; but there seems no good reason for doubting that it was once universally spoken in India. Its name, and the reputed difficulty of its grammar, have led

many persons to imagine that it has been refined by the concerted efforts of a few priests, who set themselves about inventing a new language; not like all other tongues, by the gradually improved practice of good writers and polite speakers." This notion Mr. Colebrooke shews to have arisen from mistaking the system by which the Sanscrit grammar is taught for the refinement of the language itself—"When Sanscrit was the language of Indian courts it was cultivated by all persons who devoted themselves to the liberal arts; in short, by the three first tribes, and by many classes included in the fourth."

II. "The second class of Indian languages, comprehends the written dialects which are now used in the intercourse of civil life, and which are cultivated by lettered men." "There is reason to believe, that ten polished dialects formerly prevailed in as many different civilized nations, who occupied all the fertile provinces of Hindustan and the Dekhin: evident traces of them still exist."

They are thus enumerated:—

1. "The Sâreswata was a nation which occupied the banks of the river Sâraswati." Their original language may have once prevailed through the southern and western parts of Hindustan proper, and is probably the idiom to which the name of Pracrit is generally appropriated.

2. The Canyacubjas possessed a great empire, the metropolis of which was the ancient city of Canyacubja or Canôj. "Their language, as it ap-

pears, was the Hindi or the Hindevi, which forms the groundwork of the modern Hindustani." This last is a compound of Hindi with Persian. On examination, the affinity of Hindi with the Sanscrit is peculiarly striking. That Sanscrit is the root from which Hindi has sprung, not Hindi the dialect whence Sanscrit has been refined, may be clearly proved. Nine-tenths of the Hindi may be traced back to the parent Sanscrit, but there yet remains a difficulty in accounting for the remaining portion. Sir W. Jones supposed this to be the basis of the Hindi language, and conjectured that the pure Hindi was primeval in Upper India, into which the Sanscrit was introduced by conquerors from other kingdoms in a remote age." This opinion has not derived confirmation from later researches. When any language is spread over any great extent of country, and split into a number of dialects, and these constitute the vernacular idioms of nations which remain long separated, considerable differences are found to arise between them; they acquire new words and new forms of expression. The inhabitants of Cashmere are thought to be a tribe of Canyacubjas.

3. The Gaura, or Bengáli, is the language of the country of which the ancient Gaur was once the capital. It is spoken in the provinces of Bengal and in the eastern parts in the greatest purity, containing but few words which are not evidently of Sanscrit origin.

4. Mait'hila, or Tirútiya, spoken in the sircar of

Tirhut, and as far as the Nepal mountains, has a great affinity with the Bengáli.

5. Uriya, the language of Odradesa, or Orissa.

These five Hindu nations occupy the northern and eastern parts of India: they are denominated the five Gauris. The remaining five are termed the five Dravirs, and inhabit the southern and western parts of the peninsula.

6. Dravira is the southern part of the peninsula, where the language, termed Tamul, and Malabar by Europeans, is spoken. This dialect, the Tamalah, contains a considerable portion of pure Sanscrit, with another more corrupted and a greater number of words of doubtful origin.

7. Maharashtra or Mahratta, is the language of a nation of late greatly enlarged, but which was formerly confined to a mountainous tract, to the southward of the Nermada. Like other Indian dialects it contains much pure as well as corrupt Sanscrit, with a mixture of words from an unknown source.

8. Karnata or Carnara is the ancient language of the Kárnátaca. It bears the same affinity with the Sanscrit, as most other dialects of the Peninsula.

9. Tailanga or Tilanga, the language spoken in Telingána, an ancient kingdom on the eastern coast of the peninsula; this dialect contains more of Sanscrit than many others.

10. Gurjara is the dialect of Guzerat. These are the principal languages of India:

they have been probably for many ages the dialects of so many separate kingdoms. Each of them is now spoken in a great variety of vernacular jargons. These jargons, which cannot be enumerated, constitute the third class of Indian languages, and are termed Magad'hi.

Such are the diversities of language among the kindred nations of India; but besides these nations there are various tribes of wild mountaineers in different parts of Hindostan, whose idioms have no affinity with the Sanscrit. The latter are supposed to be the aborigines of the country; that is, to have inhabited it before it was occupied by the Hindoos. Some of them resemble the people of India beyond the Ganges, and they apparently belong to the stock of Indo-Chinese nations.*

SECTION III.

Of the Physical Characters of the Hindoos.

THE natives of India are described in a passage of Dionysius the geographer, which has been cited by Sir W. Jones. Like all the ancient notices relating to India, it seems perfectly to agree with

* Those who are desirous of more particular information on the subdivisions of the Indian nations and their dialects, will find it in the introductory part of Major Wilks's History of the Mysore: in Dr. F. Buchanan's Journey in the Mysore, Canara, and Malabar, in several papers in the first ten volumes of the Asiatic Researches; also in Carey's Sanscrit Grammar, and the Critique on it in the Quarterly Review; in an article in the Edinburgh Review relating to India, vol. xxiii. and in the critique on Wilks's History of the Mysore in the same Review.

the present description of that country and its population.

Πρὸς δ' ἀναγὰς, Ἰνδῶν ἐρατεινὴ πέπταται αἶα
 πασάων πυμάτῃ, παρὰ χέλεσιν ὠκεανοῖο·
 ἦν ῥά τ' ἀνερχόμενος μακάρων ἐπὶ ἔργα καὶ ἀνδρῶν
 ἥελιος πρώτῃσιν ἐπιφλέγει ἀκτίνεσσι,
 τῷ γαίης ναέται μὲν ὑπὸ χροᾷ κυανέουσι,
 θεσπέσιον λιπὼντες, ἐειδομένας δ' ὑακίνθῳ
 πιστάτας φορέουσιν ἐπὶ κράτεσφιν ἰθείρας.*

These and some following lines descriptive of the manners of the Indians, have been thus translated by Mr. Bryant :

To the east a lovely country wide extends,
 India, whose borders the wide ocean bounds ;
 On this, the sun new rising from the main,
 Smiles pleased, and sheds his early orient beam.
 The inhabitants are swart, and in their locks
 Betray the tints of the dark hyacinth.
 Various their functions ; some the rock explore,
 And from the mine extract the latent gold ;
 Some labour at the woof with cunning skill,
 And manufacture linen ; others shape
 And polish ivory with the nicest care ;
 Many retire to rivers shoal, and plunge
 To seek the beryl flaming in its bed,
 Or glittering diamond.

The rich soil,
 Wash'd by a thousand rivers, from all sides
 Pours on the natives wealth without controul.

Although the Hindoos have been repeatedly conquered by foreign nations, the invaders and new colonists have been in too small numbers to effect any material change in the predominating

* Dionys. Perieg. 1106.

character of the people. Even the Mahomedan conquerors were unable to extirpate the ancient religion, or assimilate the great mass of the population to their own manners, as they have done to a surprising degree, in the other countries subdued by their arms. Still less is the influence exerted by foreign languages on the native idioms of India, or the effect of foreign intermarriages in altering the personal character of the people. The white colonists or new inhabitants, whether of Christian or Moslem races, have scarcely borne a greater proportion than the negroes brought into England and other European countries to the native stock of inhabitants. Mr. Orme has remarked that India has been inhabited from the earliest antiquity by a people who have no resemblance, either in their figure or manner, to any of the nations contiguous to them, and that although conquerors have established themselves at different times in different parts of India, yet the original inhabitants have lost very little of their original character. Mr. Ward says that "the Hindoos, notwithstanding their division into castes and various sects, are scarcely less peculiar and isolated in their manners than the Chinese. Their dress, he adds, their ceremonies and domestic economy have been preserved without innovation from age to age." The whole people are divided into four great tribes, and these are subdivided into numerous castes, who are allowed neither to intermarry nor intimately associate. These divisions have sub-

sisted upwards of two thousand years, since they were described by Megasthenes in the reign of the first Seleucus. How long before that age they took their rise is uncertain, but it is common to refer the Institutes of Menu, in which the distribution is recorded or described, to the eighth or ninth century before the Christian era. According to Major Orme, there are eighty-four castes in India, all of which may be recognised by a peculiar physiognomy and a form of features distinguishable to those who are conversant with the several tribes. Some castes are remarkable for beauty, others for ugliness. All, however, partake of the national character in form, complexion, and other physical traits. The following are descriptions of the persons of the Hindoos in general, drawn by eye-witnesses.

“The features of the Hindoos,” says Mr. Ward, “are more regular than those of the Chinese, Burmans, or Malays.” “Many of the higher orders of the Hindoos, especially in the northern provinces, are handsome in their features, having an oval face and a nose nearly aquiline. Some are comparatively fair, and others quite black, but a dark brown complexion is most common, with black eyes and hair. The general expression of the countenance reminds you that the Hindoo is mild and timid, rather disposed to melancholy and to effeminate pleasures. In Bengal the greatest number are below the middle stature, and very slender in body; but this description does not

altogether suit the Hindoos of the upper provinces, where you immediately perceive that you are surrounded with a people more robust and independent, though the general features are the same.*

Mr. Forbes informs us, that the Hindoos are commonly of the middle stature, slight and well proportioned, with regular and expressive features, black eyes and a serene countenance. He says, "The Hindoo women, when young, are delicate and beautiful, as far as we can reconcile beauty with the olive complexion. They are finely proportioned, their limbs small, their features soft and regular, their eyes black and languishing. Age makes rapid encroachments upon them before thirty years of age. They are often mothers at twelve, and grandmothers at twenty-five."

"The complexion of the Mahomedans in India is much the same as that of the Hindoos; a clear olive brown. Mr. Forbes agrees with all other travellers in India in reporting, that the inferior castes are of darker complexion than the superior Hindoos."

I shall now cite the description of the Hindoos by the Abbé Dubois, who long resided as a missionary in the Mysore.

"The colour of the Hindus is tawny, lighter or darker according to the provinces which they inhabit. That of the castes who are constantly

* Ward on the religion &c. of the Hindoos. Introduction, Serampore edition, 1818.

employed in the labours of agriculture, in the southern districts of the peninsula, is nearly as dark as that of the Caffres," i. e. Negroes. The Brahmans and people whose profession admits their working in the shade, such as painters, and many other artisans, are of a lighter hue: a dark coloured Brahman and a whitish Parriah are looked upon as odd occurrences, which has given birth to a proverb, common in many parts of India, "never trust a black Brahman or a white Parriah." "The tint of the Brahman approaches to the colour of copper, or perhaps, more nearly to a bright infusion of coffee." "Their women, who are still more sedentary and less exposed to the rays of the sun, are still lighter in complexion than the males." "In all castes, without exception, the Hindus have the sole of the foot and the palm of the hand much whiter than the rest of the body." "In general the Hindus have the forehead small, the face thinner and more meagre than the Europeans; and they are also very much inferior to them in strength and other physical qualities. They are lean, feeble, and incapable of supporting the labours and fatigues which the other race are habituated to. The Brahmans, in particular, scarcely ever attempt any laborious effort of the body. "This feebleness is no doubt occasioned by the nature of the climate, as well as by the quality of the food to which the greater number of Hindus are restricted. In general they eat nothing but seeds, or such insipid matters." The

mass of the people cannot obtain rice for their ordinary fare, but are obliged to sell what they raise.”

I shall refer to one other writer for a general description of the Hindoos. Le Gentil seems to have received a very favourable impression of them. He says, “*Les Indiens en général sont beaux et bien faits ; l’œil noir, vif et spirituel ; leur couleur est connue ; on y voit de très belles femmes, bien faites, ayant des traits à l’Européenne.*” “*La caste des Bramines surtout est une très belle caste, un très beau sang ; dans cette tribu on y voit les plus belles femmes, les plus jolis enfans, et tout ce monde a l’air la plus propre.*” “*On m’objectera inutilement la couleur, je n’ai rien à répondre ; c’est un préjugé, et le préjugé ne forme point objection.*”*

But though the Hindoos are spoken of by so many writers, as if they formed one nation, as distinguished from those who are foreign to India, it is not to be understood that they have no differences among themselves. On the contrary, great varieties among them have been remarked in different provinces, especially in respect to their complexion ; and if we compare the extremes in this particular, the contrast is greater than most persons would at first believe.

The people of the northern provinces are of lighter complexion than those of the south, and, in some instances at least, of better form and stature. Mr. Elphinstone has contrasted the na-

* Le Gentil, *Voy. dans le Mer de l’Inde*, tom. i. p. 94.

tives of Hindoostan proper with those of the Carnatic. The former, he says, are comparatively tall and well made, and of slow and deliberate speech, unlike the small, black, and shrivelled natives of the Carnatic, who are remarkable for the vehemence of their gesture and their volubility.* However, the same writer informs us, that the people of Sind appeared to him to be blacker than most of the natives of India. These are the inhabitants of the low and hot plains bordering on the Indus.† The people of Malabar are said to be darker in colour than the natives of other provinces, and approach to, if not equal, the blackness of the Negroes of Guinea. The Mahrattas are of a yellow tint of complexion, and the natives of the mountainous tracts in the north are of very light colour, and approach to the complexion of Europeans.

We have examples of this light variety of colour in the Hindoo races of Guzerat. The principal castes in Kattiwar, a province of that peninsula, are accurately described by a late writer who was acquainted with them by personal observation. These castes are the Rajpoots and the Kattee. As the observations respecting these tribes are important in completing the physical history of

* Elphinstone, *ubi supra*, p. 248.

† Id. p. 500. Lieutenant Pottinger informs us, that the men of Sind are dark in colour, but, taken collectively, exceedingly handsome. They are above the medium height of Asiatics, have good features and well formed limbs. The beauty of the women is proverbial." Pottinger's Travels in Beloochistan and Sind, 4to. p. 377.

the Hindoo race, I shall cite them nearly as I find them in the words of the author.

He observes that the Rajpoots, who are a higher caste, and are considered as belonging to the military tribe of Chettrees or Cshatriyas, are of tall stature. "In stature the Rajpoots may be considered to exceed the natives of the Deccan, being generally tall, but not of a robust frame. The complexion of the respectable Rajpoot is generally fair, the contour of the face long, the nose aquiline, and the eyes large, but devoid of animation; the general expression of the face is pleasing."

"The Kattees are Hindoos; they are supposed to descend from a tribe on the banks of the Indus; they do not intermarry with any other caste. The Kattee women are large and masculine in their features. They are often brides at seventeen years of age, which may account for the strength and vigour of their race, their marriages being so long delayed."

"The Kattee differs in some respects from the Rajpoot; he is more cruel in his disposition, but far exceeds him in bravery. His size is considerably larger than common, often exceeding six feet; he is sometimes seen with light hair and blue coloured eyes. His frame is athletic and bony."*

We then find, without going beyond the limits of the Hindoo nation, the greatest variety of complexions, from a black, scarcely less dark than that

* Remarks on the province of Kattiwar and its inhabitants. By Lieutenant J. M. Murdo, &c. Bombay Transactions, vol. i.

of the Yoloff, to the sanguine or xanthous complexion of the northern European.

The form of the skull in the natives of Hindoostan and the Deccan presents no decided difference from the shape common among Europeans. The only character in the osteology of the Hindoo, which has drawn the attention of anatomists, is the length of the legs, which is said to be greater, in proportion to the trunk, than in other nations.

SECTION IV.

Of the Natives of Ceylon.

THE island of Ceylon is inhabited by nations resembling in many respects the people of continental India, and connected with them more or less nearly in descent. I shall here add some observations, first, on the ancient history of these nations, and secondly, on their physical characters.

¶ 1. *Nations inhabiting Ceylon.*

In ancient times it appears that the people of Ceylon were much more closely connected with the nations of continental India, than they have been for some centuries. Ravana, the king of Lanka, is said to have had extensive possessions in the peninsula: his dominions reached northward as far as Trichinopoli, on the eastern coast, and to Haiga, on the western side.* The religion of the Brahmans probably prevailed in those times over the whole of Ceylon; and pilgrims from the con-

* Dr. F. Buchanan's Journey in Mysore, &c.

continent, who now stop at the Isle of Ramiseram, continued their progress to the temple of Siva, at Divinoor, at the southern extremity of Ceylon. Of this temple there are still extensive remains, resembling, in the style of its architecture, the temples of the Carnatic.* The religion of Buddha, which now prevails through a great part of this island, is supposed to have been introduced from Siam: this has been inferred from the style and décoration of the modern Cingalese temples, the habits of the priests, which resemble those of the yellow-robed Talapoins, and from the images of their gods. It is confirmed by the historical traditions, contained in their sacred books, which are written in the Pali language, an ancient dialect of the Sanscrit, used in various countries by the worshippers of Buddha or Godama. It is uncertain at what time this revolution took place; but it must have happened some centuries before the arrival of European colonies in India. †

Two races of people compose the population of Ceylon. The northern part of the island is inhabited by Malabars, who occupy about one half of the sea-coast from Chilaw to Battocoloro. ‡ They are of the same race with the people who inhabit the southern parts of the Indian peninsula; they still retain the religion, manners, and language

* Captain Colin Mackenzie's Remarks on some antiquities on the coasts of Ceylon, written in 1796. Asiatic Researches, vol. vi.

† M'Kenzie, *ubi supra*.

‡ A similar statement. He says, "The Veddahs speak the Cingalese language."

which they brought with them from the continent, and even contend that they have preserved the Tamul, or Malabar tongue, in greater purity than it is found in any part of Hindoostan.*

The interior country, and the southern coasts of Ceylon, are inhabited by different tribes of one original people. The Candians are confined to the centre of the island; the Cingalese occupy the southern coasts. Besides these, there is a tribe of wild people called Bedahs, or Vedahs, who inhabit the mountains in the vicinity of Batacolo: they exist entirely in the savage state, and support their lives by the game obtained by hunting, and by the spontaneous fruits of the earth.† It has been said by some that these savages are a distinct race from the other inhabitants, and descended from some more ancient people or aboriginal stock, but that is not the case; for their speech is, as Mr. Cordiner informs us, a dialect of the Cingalese language, and they are of the Hindoo religion; their barbarous manners are to be ascribed to their seclusion in a wild and mountainous country.‡ The Candians and Cingalese resemble in manners, religion, and language, and were originally one people. The Cingalese are still divided into castes, who marry only within their own race.

* Description of Ceylon, by the Rev. J. Cordiner, A. M. p. 137.

† Cordiner, *ubi supra*, p. 91.

‡ See Cordiner's account of the Bedahs, p. 91. Knox gave a similar statement. He says, "The Vaddahs speak the Chingulayes language."

The origin of the Cingalese nation is beyond the reach of history. According to local tradition they first passed over from the peninsula of India, by the way of Rama's Bridge, and brought with them the Sanscrit language, from which a great proportion of the Cingalese words are said to be evidently derivatives.* They are in all probability much more ancient inhabitants of Ceylon than the Malabars.

¶ 2. *Physical Characters of the People of Ceylon.*

"The Cingalese in general are of a slender make, and rather below the middle stature. Their limbs are slight, but well-shaped; their features regular, of the same form as those of Europeans; and their colour of various shades, but not so dark as that of the Indians on the continent." Mr. Cordiner here refers probably to the people of Malabars, who are among the darkest of the Hindoos; for some Cingalese whom I have seen were of very deep hue, and certainly nearer to the colour of negroes than of mulattoes. "Both sexes have uniformly black eyes, and long, smooth, black hair."—"The white of the eye is remarkably clear. Many of the higher classes of people, who are not exposed to the rays of the sun, have complexions

* Cordiner, p. 92. Adelung remarks on the traditionary Indian original of this people. "Das beweiset auch die sprache, sowohl die ältere als die neuere, welche ihren gemeinschaftlichen ursprung mit der der Hindú nicht verläugnen kann."

Mithridates, i. p. 232.

* Cordiner, p. 131.

so extremely fair; that they seem lighter than the brunettes of England. In all ranks the palms of the hands and the soles of the feet are uniformly white. "The Candians," says Mr. Cordiner, "do not differ from the Cingalese more than the inhabitants of the mountains in any other country, differ from those of the sea-coasts."—"The Candians are of a stouter make and fairer complexion, but not taller." Their manners are less polished, and the constant wearing of their beards adds to the natural ferocity of their appearance.*

The Malabars are a stouter and more active people than the other inhabitants.† Lastly, there are many Malays among the residents in Ceylon. They are of a lighter colour, more inclining to copper than any of the other natives of India; broader and more robust, but not taller than the Ceylonese. Their heads are compressed, and their noses flattened. The Malays are in part an Indo-Chinese people, and partly an insular race, but strongly distinguished from the class of nations belonging to the hither peninsula and to Hindoostan.

SECTION V.

Of the Gipseys.

BEFORE we take leave of the nations belonging originally to the Indian branch of the great Indo-European stock, it is requisite to take some

* Cordiner, p. 131.

† Id. p. 137.

notice of a race of people who have been for centuries scattered over many parts of Europe and Asia. The origin of the Gipseys was long unknown, till their real affinity was conjectured by Büttner; Grellman, however, has the merit of proving it. They appeared in Europe about the beginning of the fifteenth century. They call themselves Roma, Men; Kola, Blacks; and Sinte, perhaps from the river Sind, or Indus. The Persians term them Sisech Hindu, or black Hindoos, and that they really sprang from the Indian race has been ascertained by the comparison of languages.

But it remained long a question from what tribe of Hindoos the Gipseys came. This matter has been in a great measure cleared up by Capt. D. Richardson, who has proved that a great affinity subsists between the Gipseys and a sort of people in India termed Bazeegurs, who are divided into seven castes. It is very probable that from some of these the Gipseys originated. This writer has shewn, at least, by a comparative vocabulary of the Gipsey and Hindoostani languages, and of the idiom of the Bazeegurs, that an extensive affinity exists between all the three.*

Pallas† remarked, that the language of the

* See the treatise entitled, "An Account of the Bazeegurs, a sect commonly denominated Nuts," in the 7th volume of the Asiatic Researches, by Capt. D. Richardson.

† See Pallas's Travels in the Southern Provinces of the Russian empire.

land's History of the Gipseys.

Gipseys very much resembled that of the Hindoos, resorting for the purpose of trade to Astrachan, from the Indian province of Multan. Adelung has exhibited a collection of words of the Multan dialect, from the vocabularies published at Petersburg, in comparison with as many corresponding terms in the idiom of the Gipseys.* The result

* I add the numerals of these languages and a few other words, extracted from Adelung's vocabulary.

Gipsey Language.	Dialect of Multan.	Sanscrit and other Dialects.
1, Iek,	Hek,	Eka.
2, Dul,	Du,	Duaya.
3, Trin,	Trai,	Treya.
4, Shtar,	Tshar,	Tshatur.
5, Pansh,	Pensha,	Pancha.
6, Tshov,	Tshi,	Shasha.
7, Efta, Pte,		Sapta, Heft, Pers.
8, Ocho,	At,	Ashta.
9, Eaiya,	Nuv,	Nova.
10, Doesh,	Dag,	Dasa.
Maczo,	Maczi,	Fish.
Tshor,	Tshor,	Thief.
Rat,	Rat,	Blood.
Pir,	Per,	Foot.
Kar,	Kar,	Ear.

About a hundred coincidences between the Gipsey and Indian dialects are given by Adelung, and a very considerable vocabulary by Richardson. Much valuable information respecting the Gipseys in different countries of Europe, particularly respecting the Gitanos, or Gipseys, in Spain, and their dialect of the common Gipsey language, is contained in Dr. Bright's Travels in Hungary. The history of this people has lately been made the subject of a work of considerable extent; viz. Heyland's History of the Gipseys.

is, that a very near affinity certainly exists between these languages ; but whether the dialect of Multan differs less from that of the Gipseys than the idiom of any other Indian people remains to be proved.

With respect to physical characters, Captain Richardson says, that there is no peculiar feature which distinguishes the Bazeegurs from other nations of India. The Gipseys had, doubtless, at the period of migration from Hindoostan a complexion and bodily conformation resembling those of other Hindoos ; so that whatever difference subsists between the present Gipseys and the Hindoos, must be regarded as a variation from the original character, occasioned perhaps by climate. We sometimes see Gipseys in Europe of very dark complexion, who recal their Hindoo extraction, but the generality are, I think, scarcely darker than brunets of the native race. However, as the breed is not free from intermixture with a foreign blood, we cannot draw any conclusion on this subject with positive certainty.

is that a very near affinity certainly exists between these languages; but whether the dialect of Multan differs less from that of the Gipseys than the idiom of any other Indian people remains to be proved. With respect to physical characters, Captain Richardson says, that there is no peculiar feature which distinguishes the Bazeegurs from other nations of India. The Gipseys had, doubtless, at the period of migration from Hindoostan a complexion and bodily conformation resembling those of other Hindoos; so that whatever difference subsists between the present Gipseys and the Hindoos, must be regarded as a variation from the original character, occasioned either by climate. We sometimes see Gipseys of a very dark complexion, who still retain the Hindoo extraction, but the generality are of a much more decidedly darker than the pure Hindoos. However, as the breed is not free from intermixture with a foreign blood, we cannot draw any conclusion on this subject with positive certainty.

NOTES TO VOL. I.

NOTE A.

On the Language of the ancient Lybians.

SOME modern writers have conjectured that the languages spoken in Mount Atlas, and among the native tribes in other parts of Barbary, may be found to be dialects of the Carthaginian. This is a very improbable supposition, for it appears from the account given by Sallust,* of the Phœnician colony of Leptis, that the Punic language was never adopted generally by the Africans who were subject or allied to Carthage. It was long ago remarked by Dr. Shaw, that the primitive words of the Showiah, as the language of the Kabyles is called, have not the least affinity with those words which convey the same meaning in Hebrew and Arabic. It is, therefore, on the whole, unlikely, that the Lybian speech was a dialect belonging to the Semitic family of languages.

The following table will afford the reader some idea of the affinity of the dialects which are spoken in different parts of Northern Africa, among those tribes who are supposed to belong to the Libyan race. The words in the first column, marked Showiah, are taken from Dr. Shaw's

* Sallust, Bell. Jugurth. There is even some reason for supposing that the Lybians, who had the art of writing, possessed a peculiar alphabet; for Valerius Maximus mentions inscriptions made by order of Massinissa, in the characters used by his people. Valer. Max. cap. i. ; a passage cited by Vater in Mithridat. th. iii. These, however, may have been Punic letters; at least the contrary is not clear from the expressions of Valerius. Were these Numidian letters the Targee alphabet lately discovered by Dr. Oudney?

travels in Barbary; the Shilha words are from Jezreel Jones's *Dissertatio de Linguâ Shilhensi*, published by Chamberlayne in his *Oratio Dominica*. Two specimens are added of the Ertana, or Tuaric; one collected at Sokna, by Captain Lyon, who repeatedly assures us, that it is the same as the idiom of the Tuaric tribes in the desert; and the other containing a part of the words obtained at Siwah by Hornemann, who has given it with a similar observation: from these two evidences we may conclude with sufficient certainty that the Ertana language is allied to the Showiah and Shilha. In the further column some Tibboo words are added, in order to afford a comparison of the Tibboo idiom with that of the Tuaric. Vater suspected them to be allied, and there are some analogous words, but by no means such as to put their affinity beyond doubt, or even on very probable grounds.

	SHOWIAH.	SHILHA.	1 ERTANA.	2 ERTANA.	TIBBOO.
Sun	Taphrute		Tefookt.	Itfuct.	Tooggoo.
Moon	Tizeer		Tajeeri.		
	Youle				Aowree.
Day	Assa		Azil.		
Night	Eiar		Yettee.		
	Thegata.				
Head	Fouse	Eaghph	Ighrof	Achphe	Dáfoo.
Hand	Afuse	Afoose	Foos	Fuss	Awana.
Mouth	Emee	Eemough	Eemi		Tehce.
Man	Aigaz	Urgas	Mar	Aail	
Woman	Thamtouth.		Tamtoot		Adi.
Eye	Allen	Elu	Teat.	Taim	Soaz.
		Tetten			
Horse	Yeese	Aycese	Agheemar	Achmar	Askee.
	Aowde				
Mare		Alowda.			
Sheep		Only	Teel	Jelibb	Hadinni.
Camel		Aram	Leghrum	Legum	Gónee.
Water		Aman	Aman	Aman	Aec.
Meat	Aksoume		Aksoum		Yenni.

	SHOWIAN.	SHILKA.	1 ERTANA.	2 ERTANA.	TIBBOO.
Milk	Aafkee.		Akhi.		
	Ikfu.		Ashfai.		
Dog		Idee	Edee.		
Cow		Taphonest.	Ftunest.		
		Azgar.		Farr.	
Mountain.	Athrair.	Adarar.	Iddram.		
Dates	Theganee	Tepi	Tena	Timbi.	
One	Ewan	Yean	Idgen.	Troho.	
Two	Seen	Seen	Sunn	Chew.	
Three		Crat	Shard	Agono.	
Four		Koost	Erba, A.	Tuzzaw.	
Five		Summost	Khamsa, A.	Fo.	
Six		Sutheast	Setta, A.	Dessee.	
Seven		Sad	Sebbah, A.	Tootoosoo.	
Eight		Tempt		Oosoo.	
Nine		Tzau		Isse.	
Ten		Murrow		Mordum.	

Respecting the old Guanche language, spoken by the inhabitants of the Canary Islands, there can be scarcely any room for doubt that it belongs to the same stock. Dr. Vater has given a short collection of Guanche words, compared with corresponding roots in the Berber language, in which there is a decided resemblance. Vater appears to have taken them from a larger collection in Glas's History of the Canary Islands. See Mithridat. th. iii. p. 57—60, also Glas's work above cited.

NOTE B. *On the Language of the Felatahs.*

THE only specimen which has yet appeared, as far as I am informed, of the language spoken by the Felatahs, is a vocabulary obtained by Dr. Seetzen, which was first published by Dr. Vater in the Königsberg "Archiv für Philosophie, Theologie, Sprachkunde, und Geschichte." It was obtained by Dr. Seetzen from a Felatah, who was a

native of Ader, a town five days journey southward of Fezzan. This individual was of a deep, or blackish brown colour, somewhat darker than the usual complexion of the Abyssinians. "He had large, black, and bright eyes, a large hooked nose, a wide mouth, thin lips, and very white teeth: that part of the face from the root of the nose to the chin, projecting more than in Europeans."

The vocabulary of Felatah words was re-published by Dr. Vater in the third volume of the Mithridates, together with the corresponding words in the dialect of the Foulahs, on the Senegal, taken from Barbot's description of Guinea. As the Felatahs are a very important people in the history of Africa, and their connexion with the Foulahs is a fact of some interest, I shall take the liberty of inserting this vocabulary.

VOCABULARY OF FELATAH AND OF FOULAH WORDS.

FELATAH.

FOULAH.

God	Diomirao	Allah.*
Heaven	Szemima *	Hyalla.
Earth	Lissedih	Lehidy.
Fire	Njite	Gia-hingol.
Sun	Nonge	Nahangué.
Moon	Liula	Leoure.
Man	Gurko	Gorko mahodo.
Woman	Debbo	Debo.
Head	Hóre	Horde.
Eye	Giteh	Hytter.
Ear	Nuppi	Noppy.
Nose	Njel-hinerat	Hener.
Tongue	Demgal	D'heingall.
Hair	Gassahorz	Soukendo.
Hand	Néworéh	Youngo.

* In several instances Arabic words have been adopted in one of these languages and not in the other—hence the differences between the two vocabularies.

Foot . . .	Kássengál' . . .	Kavassongal.
Bread . . .	Tâmszêdje . . .	Bouron.
One . . .	Go	Guh.
Two . . .	Didi	Didy.
Three . . .	Tetti	Taty.

Of these words, except the two first, which are Arabic, in one of the dialects, and five others, which differ, all the remainder, viz., fourteen, seem to be almost precisely the same, and probably differ only through the greater or less degree of accuracy with which they were copied.

The first of these is the fact that the
 second of these is the fact that the
 third of these is the fact that the
 fourth of these is the fact that the
 fifth of these is the fact that the
 sixth of these is the fact that the
 seventh of these is the fact that the
 eighth of these is the fact that the
 ninth of these is the fact that the
 tenth of these is the fact that the

The first of these is the fact that the
 second of these is the fact that the
 third of these is the fact that the
 fourth of these is the fact that the
 fifth of these is the fact that the
 sixth of these is the fact that the
 seventh of these is the fact that the
 eighth of these is the fact that the
 ninth of these is the fact that the
 tenth of these is the fact that the
 eleventh of these is the fact that the
 twelfth of these is the fact that the
 thirteenth of these is the fact that the
 fourteenth of these is the fact that the
 fifteenth of these is the fact that the
 sixteenth of these is the fact that the
 seventeenth of these is the fact that the
 eighteenth of these is the fact that the
 nineteenth of these is the fact that the
 twentieth of these is the fact that the
 twenty-first of these is the fact that the
 twenty-second of these is the fact that the
 twenty-third of these is the fact that the
 twenty-fourth of these is the fact that the
 twenty-fifth of these is the fact that the
 twenty-sixth of these is the fact that the
 twenty-seventh of these is the fact that the
 twenty-eighth of these is the fact that the
 twenty-ninth of these is the fact that the
 thirtieth of these is the fact that the
 thirty-first of these is the fact that the
 thirty-second of these is the fact that the
 thirty-third of these is the fact that the
 thirty-fourth of these is the fact that the
 thirty-fifth of these is the fact that the
 thirty-sixth of these is the fact that the
 thirty-seventh of these is the fact that the
 thirty-eighth of these is the fact that the
 thirty-ninth of these is the fact that the
 fortieth of these is the fact that the
 forty-first of these is the fact that the
 forty-second of these is the fact that the
 forty-third of these is the fact that the
 forty-fourth of these is the fact that the
 forty-fifth of these is the fact that the
 forty-sixth of these is the fact that the
 forty-seventh of these is the fact that the
 forty-eighth of these is the fact that the
 forty-ninth of these is the fact that the
 fiftieth of these is the fact that the
 fifty-first of these is the fact that the
 fifty-second of these is the fact that the
 fifty-third of these is the fact that the
 fifty-fourth of these is the fact that the
 fifty-fifth of these is the fact that the
 fifty-sixth of these is the fact that the
 fifty-seventh of these is the fact that the
 fifty-eighth of these is the fact that the
 fifty-ninth of these is the fact that the
 sixtieth of these is the fact that the
 sixty-first of these is the fact that the
 sixty-second of these is the fact that the
 sixty-third of these is the fact that the
 sixty-fourth of these is the fact that the
 sixty-fifth of these is the fact that the
 sixty-sixth of these is the fact that the
 sixty-seventh of these is the fact that the
 sixty-eighth of these is the fact that the
 sixty-ninth of these is the fact that the
 seventieth of these is the fact that the
 seventy-first of these is the fact that the
 seventy-second of these is the fact that the
 seventy-third of these is the fact that the
 seventy-fourth of these is the fact that the
 seventy-fifth of these is the fact that the
 seventy-sixth of these is the fact that the
 seventy-seventh of these is the fact that the
 seventy-eighth of these is the fact that the
 seventy-ninth of these is the fact that the
 eightieth of these is the fact that the
 eighty-first of these is the fact that the
 eighty-second of these is the fact that the
 eighty-third of these is the fact that the
 eighty-fourth of these is the fact that the
 eighty-fifth of these is the fact that the
 eighty-sixth of these is the fact that the
 eighty-seventh of these is the fact that the
 eighty-eighth of these is the fact that the
 eighty-ninth of these is the fact that the
 ninetieth of these is the fact that the
 ninety-first of these is the fact that the
 ninety-second of these is the fact that the
 ninety-third of these is the fact that the
 ninety-fourth of these is the fact that the
 ninety-fifth of these is the fact that the
 ninety-sixth of these is the fact that the
 ninety-seventh of these is the fact that the
 ninety-eighth of these is the fact that the
 ninety-ninth of these is the fact that the
 hundredth of these is the fact that the

A Catalogue of Nations, or Index of the different Races and Tribes of Men, as distinguished by their Languages: nearly in the Order in which they are mentioned in this Work.

PART I.

Nations of Africa.

*NORTHERN AFRICA.

NATIONS.	PLACES.	LANGUAGES.	PAGES.
1. Lybian Race.			
a. Berbers.....	North Atlas.....	Berber.....	242
b. Shellahs.....	South Atlas.....	Amazigh.....	243
c. Kabyles.....	{ Algerine and Tunisian } Mountains.....	Showiah.....	
d. Guanches.....	Canary Islands.....	{ Dialect of the } Berber.....	248
e. Tuarik.....	{ Siwah, Sokna, Western } Desert.....	Ertana.....	244
f. Tibboo?.....	Eastern Desert.....	Tibboo.....	245
		See Note A.	
2. Foulah Race.			
a. Foulah of.....	Fouta Torro.....	Foulah.....	253
b. Foulah of.....	Fouta Diallo.....	Id.....	to
c. Felatah.....	Interior of Africa.....	Felatah.....	258
		Dialect of Foulah: See Note B.	
3. Yolloffs, or Whaloffs	Senegal and Gambia....	Joloff.....	251
4. Mandingos.....	{ Barra, &c..... } Manding.....	Mandingo.....	252
5. Serrawolli.....	Senegal.....		259
6. Serreres.....	Cape Verd.....		259
7. Feloops.....	River Casamanca.....		260
8. Papells.....	Rio Cacheo.....		260
9. Balantes.....	Id.....		260
10. Bisagos.....	Rio Grande.....		260
11. Biafares.....	Rio Geba.....		261
12. Basares.....			261
13. Naloubes.....	Rio Grande.....		261
14. Bagos.....			
15. Timmanees.....	{ Between Rio Nunez, and } Sierra-Leone.....		261
16. Bulloms.....			
17. Soosoos.....		Mandingo?.....	261

NATIONS.	PLACES.	LANGUAGES.	PAGES.
18. Quoias	Sherbro River.....	Said to be all dif- ferent.....	262
19. Folgias.....	Cape Palmas.....		262
20. Kroos.....			263
21. Quaquas.....	Cape Three Points.....		263
22. Buntaköos.....	N. W. of Asiantie.....		263
23. Inta Race	Countries behind the Gold Coast		264
a. Intas.....	Inta.....	Inta Language.	268
b. Asianti.....	Asiantie.....	Dialect of Ditto.	
c. Fanti	Gold Coast.....	Fetu, or Fanteg, } or Amina }	
d. Warra	Id.....	Id.	
e. Asim.....	Id.....	Id.	
f. Akim.....	Id.....	Id.	
24. Acra Race			268
a. Acra Nation....	Acra on the Gold Coast	Acra Language.	269
b. Adampi.....	Mountains of Adampi..	Dialect of Ditto...	
c. Coto.....	Slave Coast	Id.....	
d. Little Popo....		Id.....	
25. Foy Race.....			272
a. Ardrah.....	Slave Coast.....	Dialects of the Ar- drah Language.	273
b. Whidah.....			
c. Dahomans.....			
d. Mahas.....			
e. Watje.....			
26. Eboes.....	Benin.....		273
27. Moccos.....			
28. People of Jenné and the Upper Niger.....		Kalam Soudan....	274
Tombuctoo?.....			
29. Haoussans.....	Haoussa, or Soudan....	Id.?	
30. Bornouese.....	Bornou.....	Bornou Language } and 30 others. }	276
b. Bedees.....	Mountains to the West- ward.....		
31. Bagermehs	Bagermeh.....	Peculiar Language.	
32. Borghoes.....	Borgho.....	Mobha and 20 others.	
33. Fourians.....	Darfour.....	Fourian Language.	278
b.	Kordofan.....	Dialect of Ditto ...	278
34. Shilluk.....	Bahr el Abiad	Shilluk.....	279
b. Funge.....	Sennaar.....	Dialect of Ditto ...	279
35. Shangalla, or Ne- groes of Habesh.....	Geesa, Wambarea, &c...	Unknown.....	297
36. Amaaras	Western Abyssinia.....	Amharic	285 309
37. Red Races in Abyssinia.....	Countries Westward of Habesh.....	Unknown.....	299
38. Gallas.....	Country S. W. of Ha- besh.....	Unknown.....	297
39. Bedjas.....			305
a. Bisharein.....	Southern Desert on Red Sea.....		307
b. Ababdé.....	Northern Desert on Red Sea.....		
40. Nubæ, or Berberins.....	West of Nile above Egypt.....		301
41. Copts.....	Egypt.....	Coptic.....	326

NATIONS.	PLACES.	LANGUAGES.	PAGES.
	<i>** Southern Africa.</i>		
42. Kaffrarian Family.....		{ Languages allied more or less.	
a. Kaffers, proper....			
1. Koossa Kaffers..			339
2. Tambucki K....		{ Kaffer Language..	339
3. Dammaras.....			
4. Bishuanas.....			340
5. Natives of Delagoa Bay.....			345
b. Mosambique Nations.			
1. Negroes of the Mosambique Coast.....		{ Language allied to the Kaffer and Kongo. }	347
2. Makooas.....			
Macquanas.....			347
3. Monjou.....			
c. Kongo Race.			
1. Kongoes.....			
Angolans.....		{ Kongo Language..	349
Dongo People..			
2. Loango People..			
Makongo.....		{ Loango Dialect of the Kongo.	
N'Goy.....			
43. Hottentots.			
a. Hottentots of the Cape.....			
b. Namaquas.....			332
c. Koras.....			to
d. Bosjesmans, or Bushmen.....			338

PART II.

Australian, or Oceanic Nations.

A. Mallecasses, Woolly-haired Race..	{ Madagascar.....	{ Dialect partially allied to the Polynesian ..	474
			478
Oves, or Virzimbers, Tawny Race.....	{ Interior of Madagascar	{ Unknown. Peculiar.	
B. Maldivians, Tawny Race.....	{ Maladives, in Indian Ocean.....	{ Bisayan.....	473
C. Nicobar I.....	{ Interior of Nicobar ..	{ Unknown.	
D. Andamanians, Negroes.....	{ Andaman, in the Bay of Bengal.....	{ Peculiar.....	471
E. Sumatrans, Tawny Races.			
a. Battas.....	{ Interior of Sumatra....	{ Batta: allied to Polynesian ..	445
b. Malays.....	{ Menangkabau.....	{ Dialects allied to the Polynesian..	
c. Lampongs, Rejangs, &c.....	{ Different parts of Sumatra.....		
F. Javanese, Tawny Races.			449
Jawans.....	{ Java.....	{ Dialect allied to ditto.	
G. Malacca.			
a. Malays.....	{ Maritime part of Malacca	{ Malay.	
b. Samang: Papuas.	{ Mountainous part of ditto	{ Unknown.....	390

NATIONS.	PLACES.	LANGUAGES.	PAGES.
H. Borneans.			
a. Iduan { Tawny }	Interior of Borneo }	Unknown	454
b. Biajus { Races. }	Coast of ditto. }		
I. Celebes.			
a. Bugis ... { Tawny }	.....	Polynesian dialects.	452
b. Macassars { Races. }	.....	
K. Philippine Isles.			
a. Tawny Tagalos ..	Luzon, part of	{ Tagala, dialect of Polynesian.	459
b. Mountain Negroes.	Luzon, Interior.....	{ Maitim, dialect of Tagala	
c. Tawny Bisayos ...	Other Philippine Isles..	{ Bisaya, dialect of Polynesian.	
d. Aigta (woolly race)	Isla de Negros.....	{ Boholan, dialect of Bisayan ... }	462
e. Negroes of Capul..	Isle of Capul	{ Inagta, dialect of Bisayan.	
f. Lank-haired Blacks	Various parts	Unknown.	
L. Ladrones.....	{ Ladrones	Tagala	466
Tagalos			
M. Moluccas.			
a. Tawny Race .....	.....	Polynesian dialects.	467
b. Papuas.....	.....	Unknown.	
N. Savu and Timor, &c.			
a. Tawny Race	Several Isles.....	Polynesian dialects.	
b. Lank-haired Blacks	.....	Unknown.	
O. Caroline I.			
Tawny Race .....	.....	Polynesian dialects	428
P. New Zealand.			
Tawny Race .....	.....	Polynesian dialect	416
Q. Tonga Isles.			
Tawny Race .....	.....	Polynesian dialect	420
R. Society and Marquesas Isles.			
Tawny Race .....	.....	Polynesian dialect .	418
S. Easter I.....	.....	.....	414
Tawny Race .....	.....	Polynesian dialect .	424
T. Sandwich I.....	.....	Polynesian dialect .	424
U. Papuas,	{ New Guinea	{ Some of these lan- guages partial- ly allied to the Polynesian...	370
Woolly-haired			
V. New Caledonians,	{	Id.	387
Woolly-haired			
X. Papuas	of Louisiade	Unknown.....	376
.....	of Solomon's Islands ..	Id.....	377
.....	of Santa Cruz.....	Id.....	377
.....	of Taomaco	Id.....	380
.....	of Australia.....	Id.....	380
.....	of New Hebrides.....	{ Partially allied to the Polynesian }	477
.....	of Fiji.		
Y. Australians, Straight- haired	{	{ Various and un- known..... }	404
Z. Van Dieman's Land, Woolly-haired			
		Ditto.....	404

PART III.

Indo-European Nations.

NATIONS.	PLACES.	LANGUAGES.	PAGES.
A. Indian Branch			496
Subdivisions.			
a. Sareswata	{ Southern and western parts of Hindoostan proper	{ Pracrit	505
b. Cunyacubjas	Country of Canójo	Hindevi.	
c. Gauras	Bengal	Bengali.	
d. Mait'hilas	{ Sircar of Tirhut to the northward of Bengal .	{ Tirutiya.	
e. Orissas	Orissa	Uriya	506
f. Malabars or Tamuls }	Dravira and part of Cey- lon	{ Tamaleh.	
g. Mahrattas	Maharashtra	Mahratta.	
h. Canarese	Karnataka	Carnara.	
i. Telingas	Telingana	Telinga.	
k. Guzerats	Guzerat	Gurjara.	
Other branches.			
l. Cingalese ?	Ceylon		516
m. Gipseys	Scattered abroad		520

VOL. II.

B. Medo-Persian Branch.			
a. Medes and ancient Persians		Zend	9
b. Parthians		Pehlevi.	
c. Persians		Parsi.	
d. Afghans	Afghanistan	Afghan	9
e. Belooches Belooches proper } Brahooés	{ Beloochistan	{ Belooche	11
		{ Brahooé	13
f. Bucharas	{ Bukharia, Great and Little	{ Persian dialect....	15
g. Kurds	Kurdistan	Persian dialect....	16
h. Armenians	Armenia	{ Armenian. Indo- European dia- lect	16
i. Ossetes	{ Northern parts of Cau- casus	{ Ossetic. Indo - Europ. dialect }	18
C. Nations of Asia Minor and S. E. part of Europe			30
Thracian Branch			51
*In Asia.			
a. Bryges, or Phrygians }			
b. Mysians			
c. Mygdones			
d. Thyni			52
e. Medo-bithyni			
f. Bebryces			
g. Trojans?			
** In Europe.			
h. Getæ, or Dacians			53
i. Triballi			53

NATIONS.	LANGUAGES.	PAGES.
k. Macedonians and part of the Thessalians		54
l. Abantes in Eubœa		54
m. Part of the population of Attica.		
n. Illyrians?		34
o. Cimmerians?		34
2. Lydian, or Southern Branch		45
a. Carians, Lydians, and Mysians		47
b. Carians, Caunians, and Lycians		49
c. Leleges, or Cares, confounded with the Locrians and Pelasgi		51
d. Cretans		49
e. Toræbi		47
3. Pelasgic tribes.		
a. Pelasgi—Aborigines of Peloponnesus. Æolic dialect		38
1. Pelasgi of Arcadia		39
2. ——— of Argos		40
3. ——— Aegiales, or Achæans		43
b. Aeolic Greeks without the Peloponne- } Same.		
sus		
c. Pelasgi of Hellespont, or Tyrrheni. Language barbarous		36
d. Iones.		
1. Ionians proper	} Ionic dialect	43
2. Athenians	} Attic dialect	
e. Doreæ. Originally of Mount Parnassus.	Doric dialect	42
D. Nations of Italy.		
a. Umbri	Celtic dialect?	58
b. Rasenna, or Etruscans	Unknown	65
1. Etruscans of the Tyrrhene coast		68
2. ——— of Circumpadane E.		69
3. Rheti of the Rhetian Alps		67
4. Etruscans of Campania		70
c. Opici, or Ausonian Race		82
1. Elder Branch	Oscan, Celtic dialect.	
Volsci		85
Aequi		85
2. Sabine Branch	Sabine dialect of Oscan ..	83
Sabines		83
Samnites		83
Picentines		83
Lucani		
Bruttii		
Hernici		85
Marsi		85
3. Siculi		87
d. Oenotrii, or Italo-Æolians		78
1. Aborigines, or Latins		81
2. Peucetii		81
3. Chaones		81
N. B.—In these are not included the Greek Colonists of Magna Græcia.		
E. Remains of some Races in the West of Europe, perhaps not Indo-Euro- pean.		
*a. Iberians of Spain		92
Turditani or Turduli?		92
Callaici.		
Asturians.		
Cantabri.		
Vascones.		
b. Iberi of Gaul, or Aquitani.		

NATIONS.	LANGUAGES.	PAGES.
c. Iberi of Provence or Sicani.....		94
**d. Ligurians—a different race.....		
F. Celtic Race.		
a. Celtic Tribes in Spain.		
1. Celtiberi and Berones, to the Southward of the Iberus.....		91
2. Bætic Celtæ, between the Tagus and the Anas.....		91
3. Celtæ of the Nerian promontory.....		92
b. Celtæ proper, of Gaul.		
c. Britons, ancestors of the		
1. Welsh.		
2. Strathclywd Britons.....		134
3. Cornish.		
4. Armorican Britons		111
d. Caledonians, or Northern Britons.		
Picts		142
e. Belgæ		119
1. Of Gaul.		
2. Of Britain.		
3. Of Ireland.		
4. Scoti.....		139
G. German Race		150
a. Suevic, or Teutonic branch	Upper German	156
1. Suevi or Allemanni	} Ober-deutsch	156
2. Vandali		
3. Goths	Mæso-Gothic	160
4. Lombards.		
b. Western German Branch.....	Lower German, or Saxon	157
1. Saxons.		
2. Franks.		
3. Frisians.		
c. Mixed.		
1. Scandinavians.		
2. Danes.		
H. Slavonian Race.		
a. Antes, or Eastern Branch		197
1. Great Russian.		
2. Kiewite Russian.		
* * Cossacs.		
3. Illyrian Slaves.		
* Servians.		
Bosnians.		
Bulgarians.		
* * Kroats		
Slavonians proper.		
Western Dalmatians.		
*** Wends of Cænthia, &c.		
b. Slavini, or Western Branch.....		199
1. Poles.		
2. Tschechi, or Bohemians.		
3. Serves, or Lusatians.		
4. Northern Wends.		

N.B. The old Prussian, or Lettish Race, are a mixture of Germans and Slavonians. See Vater, th. ii.

PART IV.

Western Asiatic Nations.

I. Semitic, or Syrian Nations.

*Proper Semitic.

NATIONS.	PLACES.	LANGUAGES.	PAGES.
a. Elymæi, or Elam..	Elymais	Unknown	211
b. Assur, or Assyrians	Shinar, Nineveh, &c. ..	Ditto.	
c. Chasdim, or Arph- chesed	Kurdistan		212
1. Branch.			
Hebrews and Idumeans		Hebrew.	
2. Beni Yoktan, or Arabs		Arabic.	
3. Chasdim, or Chaldeans		Chaldee ?	
d. Lud	Lydia ?		
e. Aramæans	Syria and Cappadocia ..	Syriac	215

** *Chamite Nations, allied in Language to the Semitic.*

f. Phœnicians, or de- scendants of Ca- naan	Phœnicia, Sidon, &c.	Punic.	217
g. Philistines, a Branch of the Mizraim.			
h. Mizraim, or Egyp- tians?	Remotely allied to the Semitic?		
i. Cush or Ethiopians?			
II. Georgians			233
a. Iberian Branch... ..	Kartuel, or Proper Geor- gia	a. Ancient Georgian.	
b. Mingrelian Branch		b. Modern Georgian.	
c. Suani	Colchis	Dialect of Georgian	233
d. Lazi	Northward of Colchis..	Ditto	233
	Trebisond	Ditto	233

III. Caucasæan Nations.

a. Western Caucasæ- ans.	Eastern parts of the chain of Caucasus	Dialects of the Cir- cassian Language	235
1. Circassians.			
2. Abassi.			
b. Middle Caucasæans.			
1. Tschetschengi ..	Middle Region of Cau- casus	Remote dialects of the same Lan- guage	238
2. Inguschi			
c. Eastern Caucasæ- ans, or Lesghi	Eastern parts	Ditto	239

PART V.

Races of Northern Asia and Eastern Europe.

I. Tschudish Nations	244
a. Finnish Branch	250
1. Finns Proper.	
2. Esthonians and Liefi.	
3. Lapplanders.	
b. Permian Branch	255
1. Permians and Syrjæniens.	

* These nations are arranged according to the genealogy in the Toldoth Beni Noah, as illustrated by Michaëlis.

NATIONS.	LANGUAGES.	PAGES.
2. Votiaks.		
3. Tscheremisses.		
4. Mordouans.		
c. Uralian Branch.....	Languages remotely allied to the Finnish.....	259
1. Vogouls.....		259
2. Ostiaks.....		261
3. Hungarians.....		262
II. Samoiedes.....	Dialects of the Samoiede Language.....	268
a. Samoiedes on the Icy Sea.....		268
b. Southern Samoiedes of the Sayan Mountains.....		270
*Uriangchai, or Chinese Samoiedes.....		272
II. Mongolian Race.....		275
a. Mongoles.		
b. Buriaets.		
c. Kalmucs.		
IV. Tartar, or Turkish Race.....		281
a. Western Tartars.....	Dialects of the Tartar Language....	286
1. Tartars of Kiptschak.....		286
2. Tartars of the Crimea.....		286
3. Nogay Tartars.....		288
4. Bashkirs.....		288
b. Southern Tartars, or Turks.....		289
5. Turkomans.....		289
6. Usbeks.....		289
7. Turks of Turkestan.....		289
c. Tartars of Northern Asia.....		290
8. Kirguis.....		290
9. Siberian Tartars.....		291
10. Yakuts, or Socha.....		292
V. Tungusians.....		299
a. Tungusians Proper.....	Tunguse.....	301
b. Mantchu, or Chinese Tungusians.....		301
VI. Yukagers, or Andon Domni.....		305
VII. Koriaks.....		307
a. Proper Koriaks.....	Dialects of the Koriak.....	308
b. Tschuktschi.....		308
* Rein-Deer, or Nomade Tschuktschi.....		
VIII. Kamtschadales.....		311
IX. Aino, or Kurilian Race.....		312
X. Japanese and Lieu-kieu.....		314
XI. Koreans.....		318

Chinese and Indo-Chinese Nations.

I. Chinese.....	Languages Monosyllabic.....	320
II. Tibetans.....		324
III. Ava, or Birman Race.....		327
b. Arrakanese.		
IV. Siamese.....		327
b. Laos.		
V. Anam.		
Tunkin, Cochin-China, and Cambodja....		328

PART VI.

NATIONS.	PLACES.	LANGUAGES.	PAGES.
American Races and Languages.....			336
1. Department—North-Western and Western Races.....			358
A. Nations of Anahuac.....			360
* Nations allied in Language to the Aztecas.....			360
1. Nahuatlacas, or the Seven Tribes, viz. }			363
Sochimilcas.		} Aztec Language.	}
Chalchese.			
Colhuas.			
Tlascalas.			
Tlahuicas.			
Tepanecas.			
Aztecas.			
2. Toltecas.....			364
3. Chechemecas.....			365
4. Acolhuas.....			366
* Nations of Languages different from the Aztec.....			366
1. Othomi.....	} Northward of Mexico.....		365
2. Totonacs...			
3. Huastecas.	Northward of Mexico	Lang. Huasteca.....	367
b. People of Guatemala.....	Poconchi	} Dialects of Huasteca.	}
c. People of Yucatan.....	Maya...		
d. Aborigines of Cuba, Hispaniola, }	Maya ..		
Jamaica.....			
4. Tarascas.....	Mechuacan.....	L. peculiar.....	368
5. Zapotecas.....	Zapotecapan.....	Id.....	368
6. Mixtecas.....	Mixtecapan.....	Id.....	368
7. People of Chiapa.....		Ten different Lang.	367
B. Nations between Anahuac and the Rio Gila.....			371
* Allied in Language to the Aztecas.			
1. Tribes of.....	Sinaloa and Sonora.....		371
2. Tarahumara.....	Tarahumara Mountains	} Lang. remotely allied to the Aztec.....	} 372
Eudeve.....	} Pimeria Alta.....		
Opata.....			
3. Cora.....	Missions of Nayarit.....	Nearly allied to the Aztec....	372
** Unconnected in Language with the Aztecas.			
Moqui and other Tribes.....	Yaquesila.....		373
C. Races on the North-Western Coast of America, speaking Languages allied to the Aztec.....			373
1. Yucuatlian Race..	Nootka Sound.....	}	375
	Vancouver's Island.....		
	Port Discovery.....		
2. Koluschian Race..	Queen Charlotte's Is- lands.....	}	375
	Norfolk Bay.....		
	Norfolk Sound.....		
	Portlock's Haven.....		
	Port des Français.....		
	Port Musgrave.....		
3. Ugaliachmutzi.....	Mount St. Elias.....		378
4. Kinaitzi.....	Bay of the Kinaitzi.		
D. Nations of California.....			385
4. Cochimi.			
b. Laymon, or Northern Cochimi.....			386

NATIONS.	PLACES.	LANGUAGES.	PAGES.
2. Pericu.			
3. Loretto.			
b. Guaycuru.....	} Dialects of Loretto.....		386
c. Uchiti.....			

Second Department of American Nations.

Tribes of the Karalit, or Esquimaux.....			401
A. Southern Esquimaux	P. William's Sound.....	}	401
	Jakutat.....		
B. Tschugazzi.....	Cook's Inlet, &c.....	}	402
C. Konægi.....	Kadjak.....		
D. Stationary Tschuktschi.....	Asiatic Coast.....	}	402
	Mouth of Anadyr.....		
E. Natives of.....	Norton Sound.....	}	403
F. Natives of.....	Unalashka.....		
		Language partly allied to the Karalit.....	403

Third Department of American Nations.

Races of People in the Eastern parts of North America.....	411
I. Algonquin Race, or Wapanachki.....	414

* Eastern Branch, Tribes to the Eastward of the Mississippi.

a. Lenni Lénape, or Delaware Indians.	}	Between the Hudson River and the Potomac.	416
Unámis, or Furies.....			
Unalachtigo, or Turkeys.....			
Minsi or Monseys.....			
b. Abenaki.....	}	Acadia.....	417
c. Micmacs, or Souriquois.....			
d. Canibas.....			
e. Etchemins, &c. &c.			
f. Sankikani.....		Western Side of Hudson.	
g. Naragansets and Natics.....		New England.	
h. Mahicanni, or Mohegans.			
i. Nentego, or Nanticokes.....		Virginia and Maryland.	
k. Sawwano.....		Georgia and Florida.	
l. Pampticoughs.....		N. Carolina.	
* * Western Branches of the Algonquin Race.			
m. Miami, or Illinois.....			419
n. Piankishas.....		Wabash River.....	419
o. Kikkapoos.....		Lake Michigan.....	419
p. Potowatomi.....		Lake Michigan.....	419
q. Chippewa.....		S. of Lake Superior.....	421
r. Neeneawesik, viz., Ottoways, } Fols Avoins, Sauks, &c. }			420
* * * Northern Branches of the Algonquin Race.			
s. Algonquins of Canada.....			422
t. Knisteneaux, or Crees.....		Canada.....	423

NATIONS.	PLACES.	LANGUAGES.	PAGES.
II. Race of Iroquois, or Mengwe, and Nations allied to them.....			424
a. Aquanoshioni or Six Nations.....			
1. Senecas	} People of the Older League		} 424
2. Mohawks			
3. Onondagos			
4. Oneidas			
5. Cayugas			
6. Tuscaroras			
b. Hurons			425
c. Dakota, or Sioux.....			426
d. Osages, Missouris, Kanes, Ot- toes, Mahaws, Winnebagoes.	} Interior of North America ..	} to	} 428
III. Floridian Nations.....			
a. Cherokees.....			431
b. Chikkasahs and Choktahs			432
c. Creeks, or Muskohge, and Seminoles			433
d. Other Nations of Florida.....			
Woccons and Katabha.....			435
Apalachians.....			
Natchez			436

Fourth Department of the American Nations.

Nations in the Interior of North America, and in Louisiana.

1. Chepewyan.....	} North Western Region between the Western Lakes and the Rocky Mountains		437
b. Nagailer Indians, or Carriers			
c. Beaver Indians..	} Rocky Mountains	} Dialects of Che- pewyan.....	} 439
d. Nascud Denée..			
e. Slouacuss Dinais			
2. Paegan Indians ..	} Southern Saskatchewan River	} Dialects of a pe- culiar language }	} 441
b. Black Foot I. ...			
c. Blood Indians ..			
3. Snake Indians....	Rocky Mountains	Peculiar	441
4. Crow Indians	Rocky Mountains	Peculiar	441
b. Mandans	Upper Missouri	Dialect of ditto...	441
5. Fall Indians, or Slave Indians, or Gros Ventres	} N. E. side of the Rocky Mountains	} Peculiar	} 441
b. Minnetarees ...			
6. Pawnees	Yellow Stone River....	Dialect of the same	441
7. Caddos	Rio Platte and Konsas..	Peculiar	442
8. Tankards.....	Lower Mississippi.		
9. Paducas.....	Red River.		
a. Ietans or Cuman- ches	} Frontiers of New Mexi- co	} Dialects of the Pa- duca Language }	} 444
b. Kyaways.....			
c. Utahs			
10. Apaches, and Lee Panis	} New Mexican Mountains	} Peculiar	} 445
b. Nanahaws			

SOUTH AMERICANS.

Fifth Department of the American Nations.

NATIONS.	PLACES.	LANGUAGES.	PAGES.
Nations of Chili and Patagonia			462
1. Moluches, or Araucanos.			
a. Picunches	N. of Chili	Moluche, or Chilenian Language	464
b. Pehuenches	Middle parts		
Huilliches	From Valdivia to the Sts. of Magellan		
2. Puelches, or Eastern People			466
Pampa { a. Taluhets	S. of Buenos Ayres	Puelche Language	467
Indians { b. Divihets	S.W. of the Taluhets		
c. Chechehets	Rio Negro		
d. Tehuelhets, or Patagonians	Patagonia	Tehuel Language	468
dd. Yacana-Cunnee	Straits of Magellan		
dd. Pesharais	Tierra del Fuego ...	Tehuel ..	469
			477
			478

Sixth Department of the American Nations.

Nations of the Guarani Race			479
1. Southern Guarani			
2. Western Guarani	Paraguay	Guarani Language	482
Guarayos			
Chiriguanos			
Cirionos			
3. Eastern Guarani, or Tupi	Brazil	Dialect of Guarani	484
4. Omagua	Banks of Maragnon	Languages related to the Guarani	485
b. Tocantini			
	Brazil	Dialect of Omagua ..	484

Seventh Department of the American Nations.

Nations of Paraguay and Chaco exclusive of the Guarani.

* Of Eastern Paraguay.

1. Charrua	Countries on the Uruguay	Dialects of the Charrua Language	492
b. Guenoa			
c. Yaro &c.			
2. Guayanas	On the Parana	Peculiar	492
3. Various other Nations		Diversity of Languages	497

** Nations of Chaco.

1. Mbaya	Mbaya Language ..	500
b. Abipones		
c. Tobas		
2. Nations of Chaco	Diversity of Languages	500

Eighth Department of the American Nations.

Nations from the twentieth Degree of S. L. to the latitude of the Maragnon			503
* Nations to the Eastward of the Andes			504
51 Nations in Brazil exclusive of the Tupi and Omagua before mentioned		Languages various but unknown ..	

NATIONS. PLACES. LANGUAGES. PAGES.

Zamuca	Spanish territory and Missions...	Various but un- known	505
Chiquitos			
Moxos			
Panos			
&c.; &c.			
** Westward of the Andes.			
1. Incas, or Peruvians	Charcas	Quichua	505 to 508
2. Aymares		Aymara	
3. Puquiña Race		Puquina	
4. Mochica Race		Mochica	

Ninth Department of the American Nations.

Nations of the Northern Region of South America.

a. Quitus	Quito	117 Languages....	501
b. 116 Nations	In Quito and the six ad- jacent Governments..		
c. 16 Nations	Governments of the Mai- nas and Maragnón ...	63 Dialects and 16 distinct Lan- guages	510
d. Maypures	Upper Orinoco.		
e. Salivi	Orinoco	Various Languages.	511
f. Yarura			
g. Ottomacs			
h. Caribbean Race.			
1. Caribbees of S. America	From Orinoco to the Ma- ragnon	Caribbean Lan- guages	511
2. Caraihs of	Lesser Antilles		
3. Tamanacs	Right bank of Orinoco	Languages rela- ted to the Ca- ribbean.....	512
4. Arawacs	Surinam		
5. Guäraünas	Isles of the Orinoco		
6. Guaiquerias	Araya		
7. Cumanagotos	Piritoo		
8. Pariagotos	Paria		
9. Chaymas	Mountains of Cocollar ..		

END OF VOL. I